WVU TECH

2017-2018 ACADEMIC CATALOG

The West Virginia University Catalog is a general source of information about course offerings, academic programs and requirements, expenses, rules, and policies. In order to reach the goals and fulfill the mission of the University, the courses, requirements, and regulations contained herein are subject to continuing review and change by the West Virginia Higher Education Policy Commission, the WVU Board of Governors, University administrators, and the faculties of the schools and colleges. The University, therefore, reserves the right to change, delete, supplement, or otherwise amend the information, course offerings, requirements, rules, and policies contained herein without prior notice.

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West Virginia University Institute of Technology

A Short History of WVU Tech

The West Virginia University Institute of Technology (WVU Tech) was established in February 1895 under the name, Montgomery Preparatory School located in Montgomery, WV. In its earliest years, the school provided academic preparation for students from Southern West Virginia who were bound for West Virginia University. With the passing of time, as new community needs emerged the school changed in response to these needs. In 1917, the curriculum became vocational in nature and the school was renamed the West Virginia Trade School. In 1921, the school became a junior college, the New River State School. Ten years later, the school name was changed to New River State College reflecting its mandate to provide baccalaureate education. Then, in 1941, when technical and business programs were added to serve regional businesses and industries, the college became the West Virginia Institute of Technology. In 1952, baccalaureate degrees in engineering were added. In 1996, the college was named West Virginia University Institute of Technology, when it became a regional campus of West Virginia University. Subsequently, in 2006, WVU Tech became a full division of West Virginia University. In Fall 2016, following the acquisition of a campus in Beckley, WV, WVU Tech offered classes on both the Montgomery and Beckley campuses for one academic year. WVU Tech moved in its entirety to Beckley in the summer of 2017. WVU Tech offers a broad array of baccalaureate degrees in business, science, the humanities and social sciences, and offers 9 degrees in engineering, computer science and engineering technology that are ABET accredited and have received national rankings. Degrees include a general education curriculum that fosters educational breadth and career skills, and students engage in a wide range of service learning, athletic and extra-curricular activities. A WVU Nursing degree is offered on the Beckley Campus through WVU Tech, and the campus is also home to the Raleigh County Co-operative Extension Service and the LaunchLab to promote regional economic success.

Location

BECKLEY CAMPUS

WVU Tech (Beckley Campus) is located in Beckley, West Virginia. Situated in scenic Raleigh County in southern West Virginia, Beckley has a population of about 17,500. Beckley is a vibrant and growing community in close proximity to many of West Virginia's wild and wonderful outdoor recreation areas.

Major U.S. highways serving the Beckley campus of WVU Tech include Interstate Routes 64 and 77 and the US Route 19, a four lane highway. Within 11 miles of Beckley is Amtrak's Prince Station. Air services are provided through Yeager Airport in Charleston, WV or Beckley Raleigh County Memorial Airport.

Within sixty minutes of both the Montgomery and Beckley campuses are some of the best "wild and wonderful" recreational opportunities in the eastern United States. Hawks Nest State Park, with its aerial tram to the bottom of the New River Canyon, is within 20 miles. Thirty miles away is the New River Gorge Bridge, the longest arch bridge east of the Mississippi River and third longest in the world, that plays host to the extreme adventure event, Bridge Day. Other nearby parks, Kanawha State Forest, Coonskin Park, Babcock State Park, Summersville Lake and Stephen's Lake, are between one and two hours away and afford abundant opportunities to picnic, swim, boat, and fish. Adventure enthusiasts have next-door access to such highly desirable sports as zip lining, whitewater rafting, rock climbing, hiking, mountain biking, off-road riding and driving, Frisbee Golf and the exhilarating winter sports of snowboarding, snowshoeing, snow tubing, and alpine, cross-country, and downhill skiing. Adjacent to Beckley is the Summit Bechtel Reserve, national high adventure base of the Boy Scouts and host to national and international jamborees.

Tech Golden Bear Alumni Association

The goals of the Tech Golden Bear Alumni Association are twofold: to promote the interests of the University and to establish mutually beneficial relationships between the University, its alumni, and other appropriate constituent groups. All former students who completed academic courses at New River State College, West Virginia Institute of Technology, the Community and Technical College of West Virginia Institute of Technology and West Virginia University Institute of Technology qualify for active membership. Members of the faculty, both current and emeritus, hold honorary memberships, and friends of the University may be named to associate membership. Details about the Tech Golden Bear Alumni Association are available online at http://alumni.wvutech.edu/, by email at tech-alumni@mail.wvu.edu, by telephone at 304.929.1254, or by writing WVU Tech Alumni Relations, 410 Neville Street, Beckley, WV 25801.

Disclaimer

This West Virginia University Institute of Technology (WVU Tech) 2017-2018 College Catalog is intended as a general reference on degree programs and their requirements, course offerings, admission, graduation requirements, and other academic rules and regulations of the institution. WVU Tech reserves the right to change, delete, supplement, or otherwise amend the contents of this catalog as necessary without prior notice. The operations of this institution are subject to continuing review and change. WVU Tech is governed by to the West Virginia University Board of Governors. Many policies and rules in this catalog are identical to those for West Virginia University or may be represented on West Virginia University websites. However, other language in this catalog is unique to WVU Tech, so that WVU language should not be employed in all cases. West Virginia University language is not applicable to WVU Tech in all cases.

In this section:

MISSION

West Virginia University Institute of Technology provides an accessible and supportive environment in which students are guided to be active and contributing members of society by fostering intellectual and personal growth through comprehensive educational experiences

VISION

To be a nationally-recognized and preeminent regional undergraduate STEM (Science, Technology, Engineering, and Mathematics) teaching institution with well-balanced curricula across diverse academic disciplines.

GOALS AND OBJECTIVES

Goal 1: Engage undergraduate students in a challenging academic environment.

Objectives

1. Educate, retain, and graduate the leaders of tomorrow at the undergraduate level.
2. Encourage innovation in teaching and, through assessment of outcomes and objectives, transform the curriculum to provide students with the skills they need to succeed in a rapidly changing global society.
3. Strengthen relationships with state and regional primary and secondary education systems, as well as community and technical colleges, to facilitate a seamless, life-long learning process.

Goal 2: Excel in scholarly activity, professional development, and innovation throughout the institution.

Objectives

1. Increase scholarly activity addressing challenges faced by West Virginia, the nation, and the world.
2. Strengthen interdisciplinary activity in scholarship, professional development, and creativity.
3. Encourage interdisciplinary activity in scholarship, professional development, and creativity.

Goal 3: Maintain and strengthen an environment that promotes, attracts, supports, and includes diverse groups of students, faculty and staff.

Objectives

1. Incorporate diversity broadly into the curriculum.
2. Facilitate intercultural, intercommunity, and campus-wide outreach.

Goal 4: Advance national awareness, international activity, and global engagement.

Objectives

1. Promote international activity, world-wide engagement, and awareness of national and global issues.
2. Integrate global themes broadly into the curriculum.

Goal 5: Enhance the well-being and the quality of life of the people of West Virginia.

Objectives

1. Promote sustainable economic development and a cultural environment that improve the quality of life throughout the state.
2. Increase opportunities for West Virginians through life-long learning and community outreach.

RESEARCH AND SCHOLARSHIP

As West Virginia's flagship research institution, WVU undertakes scholarly activity that addresses the challenges most critical to today's world and the practice of multidisciplinary research. At WVU Tech, a division campus where the educational mission is of paramount importance, faculty pursue an active agenda of research and scholarship which contributes to the vibrancy of their teaching and current knowledge in their fields.

WELL-BEING AND QUALITY OF LIFE

The Smith-Lever Act of 1914 created a Cooperative Extension Service for each land-grant institution. The purpose of the Extension Service was to disseminate the findings of the universities' agricultural stations and provide training and programs on home economics and other practical subjects. WVU has sustained its commitment to the state by supporting an Extension Service office with a faculty presence in all of West Virginia's 55 counties, staffed by faculty county agents.

The educational programs and initiatives of the WVU Extension Service focus on service to the state and exemplify West Virginia University's commitment to the public good by connecting the knowledge and research of WVU with citizen and community needs. The Extension Service's programs are driven by four major initiatives: (1) 4-H youth development; (2) family and health; (3) agriculture and natural resources; and (4) community, workforce, and economic development.

The Raleigh County Extension office is located in the Neville Street Building on the WVU Tech campus in Beckley.

SOCIAL JUSTICE AND MEDIATION OF CONFLICT

WVU Tech is committed to assuring that all individuals and groups have access to all of the benefits of the University. Such assurance is possible only in an atmosphere of mutual respect and trust, where basic concepts and principles of social justice are integral to daily practice. All groups on campus (students, faculty, staff, administrators, and constituent groups) have the legal and moral responsibility to promote opportunity, equality, civility, and respect for all peoples. WVU Tech is also committed to assuring the resolution of conflict through mediation, a structured process of communication in which conflicting parties are guided in discussion and resolution of matters of conflict. Information and assistance with filing a complaint or obtaining mediation services is available online at http://diversity.wvu.edu/ea/mediation-services/mediation or by telephone at 304.293.5600, by email at diversity@mail.wvu.edu, or by writing the Division of Diversity, Equity and Inclusion, West Virginia University, PO Box 6202, Morgantown, WV 26506-6202.

ACCESSIBILITY SERVICES

WVU Tech partners with WVU's Office of Accessibility Services (http://accessibilityservices.wvu.edu) which is dedicated to helping students achieve their academic goals regardless of any physical, learning, psychological, sensory, or other documented disability. West Virginia University's process for providing disability-related accommodations follows guidelines of the Americans with Disabilities Act, Section 504 of the Rehabilitation Act of 1973, and current case law.

Accreditation

West Virginia University Institute of Technology is accredited by The Higher Learning Commission as a division of West Virginia University. West Virginia University is a member of the North Central Association of Colleges and Schools. Information regarding affiliation status may be directed to North Central Association of Colleges and Schools, Higher Learning Commission, 30 North LaSalle Street, Suite 2400, Chicago, Illinois 60652-2504.

Information Regarding specialized program accreditation may be directed to the following accrediting agencies:

Engineering Programs: Engineering Accreditation Commission of ABET, http://www.abet.org/.

Engineering Technology Programs: Engineering Technology Accreditation Commission of ABET, http://www.abet.org/.

Computer Science Programs: Computing Accreditation Commission of ABET, http://www.abet.org/.

Nursing BSN Program: Commission on Collegiate Nursing Education, 1 DuPont Circle, NW, Suite 530, Washington, DC 20036, http://www.aacn.nche.edu/ccne-accreditation.

In this section:

Governor of West Virginia

- Jim Justice, *Governor*

West Virginia University Board of Governors

- William D. Wilmoth, *Chair, Wheeling*
- David B. Alvarez, *Vice Chair, Bridgeport*
- Taunja Willis Miller, *Secretary, Morgantown*
- Timothy Bailey, *Hurricane*
- Elmer Coppoolse, *Lewisburg*
- Thomas V. Flaherty, *Charleston*
- Thomas A. Heywood, *Charleston*
- Dr. Stanley Hileman, *Faculty Representative, Morgantown*
- Blake Humphrey, *Student Representative, Wheeling*
- J. Thomas Jones, *Morgantown*
- Dixie Martinelli, *Classified Staff Representative*, *Morgantown*
- Edward L. Robinson, *Charleston*
- J. Robert "JR" Rogers, *Hurricane*
- Benjamin M. Statler*, Pittsburgh*
- Dr. Matthew C. Valenti, *Faculty Representative, Morgantown*
- Kimberly Weaver, *Baltimore, MD*

The West Virginia University Board of Governors (the "Board") was created by the West Virginia Legislature as the governing body of the West Virginia University system, including West Virginia University, West Virginia University Potomac State College, and West Virginia University Institute of Technology (collectively the "University"). The Board has the mission of general supervision and control over the academic and business affairs of the University.

West Virginia University is an Equal Opportunity/Affirmative Action Institution. The University does not discriminate on the basis of race, sex, age, disability, protected veteran status, religion, sexual orientation, color, national origin, or other class protected by the University's non-discrimination policy (BOG Policy 44 (http://catalog.wvu.edu/undergraduate/Policy_44_-_December_18_2015_Amendment.pdf)) in the administration of any of its educational programs or activities or with respect to admission or employment. Further, faculty, staff, students, and applicants are protected from retaliation for filing complaints or assisting in an investigation under the University's Equal Opportunity/Affirmative Action Plan. Inquiries regarding the University's non-discrimination policy may be sent to the Office of Diversity, Equity, and Inclusion.

West Virginia University Administration

- E. Gordon Gee, *President*
- Joyce McConnell, *Provost and Vice President for Academic Affairs*

West Virginia University Institute of Technology Administration

- Carolyn Long, *Campus President* (provides leadership for WVU Tech as a divisional campus of WVU)
- Nigel Clark, *Campus Provost*

Deans

- *College of Business, Humanities, and Social Sciences*, Stephen Brown
- *Leonard C. Nelson College of Engineering and Sciences*, Zeljko Torbica
- *Department of Nursing*, Crystal Sheaves

Effective July 1, 2001, the West Virginia University (WVU) Board of Governors is vested by law and with the authority for the control and management of WVU and the divisional campuses.. The board includes thirteen lay members, two faculty members, a staff member, and one student member. The University president, appointed by the Board of Governors, is the chief executive officer of the University. A Campus President provides leadership for WVU Tech as a divisional campus of the University. The Chair of the WVU Tech Board of Visitors, an advisory body, is a member of the WVU Board of Governors.

The WVU Faculty Senate is the vehicle for faculty participation in the governance of West Virginia University and its divisional campuses, including WVU Tech. It is a legislative body with original jurisdiction over all matters of academic interest and educational policy that concern the entire University or affect more than one college or school. The senate's decisions are subject to review and approval by the president and the Board of Governors. Senators are elected by members of the University faculty to represent their colleges and other constituencies. Each senator represents twenty members of the University Faculty. The senate is presided over by an elected chair. The WVU Faculty Senate includes senators who are elected by the faculty at WVU Tech. On the WVU Tech campus, the faculty are represented by the Faculty Assembly. This body is make up of all full-time faculty, including visiting appointments, as well as those with FEAP appointments. The Faculty Assembly is presided over by an elected chair.

The Staff Council is an advisory council to the Campus President, and provides a means for all classified employees to express their opinions about employment conditions, fringe benefits, employee relations, or other areas that affect their careers.

Students are represented by the Student Government Association, which is made of executive officers and representatives elected by the student body. Members of the SGA serve on various campus committees.

2017-2018 Academic Calendar

Please visit http://techregistrar.wvutech.edu/academic-calendar for more information.

Academic Standards

Academic Rights, Penalties, and Appeals

The policies described in this section are based on the West Virginia University (WVU) Board of Governors Policy 15, Student Academic Rights. This section expands the general policy to include procedures for undergraduate, graduate, and professional students at WVU (including the Potomac State and WVU Tech campuses).

A student, by voluntarily accepting admission to West Virginia University (WVU) or enrolling in a class or course of study offered by WVU, accepts the academic requirements and criteria of the institution. Normally students may finish a program of study according to the requirements under which they were admitted to the program. However, requirements are subject to change at any time with reasonable notice provided to students. It is the student's responsibility to fulfill coursework and degree or certificate requirements and to know and meet criteria for satisfactory academic progress and completion of the program. Students are expected to adhere to academic requirements and standards in all academic settings, such as classrooms, laboratories, and clinics, and during any activities that are part of academic requirements. Further, WVU students are citizens of a broader academic community. As such, the University expects that every member of its academic community share its historic and traditional commitment to honesty, integrity, and the search for truth. To meet these standards, academic dishonesty is prohibited and is subject to academic penalties. Students who fail to meet academic requirements or standards, or who engage in academic dishonesty, may be subject to one or more of the academic penalties described in the Academic Penalties section.

Any question of interpretation regarding student rights and responsibilities, academic penalties, or appeal processes for final grades, charges of academic dishonesty, or academic penalties shall be referred to the Provost and Vice President of Academic Affairs, the Vice President for Health Sciences, or the divisional campus President, as appropriate, for final determination.

Any behaviors not academic in nature but related to student conduct should be referred to the Campus Student Code (see here (https://studentconduct.wvu.edu)) as stipulated in Board of Governors Policy 31 (http://bog.wvu.edu/files/d/4c27ce4e-93b5-451b-a557-c9d8ab25a773/policy-31-dec-18-2015-amendment.pdf). Although academic penalties are imposed on students who engage in academic dishonesty according to procedures described below, findings of academic dishonesty may also be taken into consideration with respect to disciplinary penalties and procedures described in the Campus Student Code.

Academic Rights

Each student at West Virginia University has the following academic rights (as well as others; see BOG Policy 15 (http://bog.wvu.edu/policies)):

1. Right to have their performance evaluated solely upon performance as measured against academic standards. The student shall not be evaluated prejudicially, capriciously, or arbitrarily. The student shall not be graded, nor shall their performance be evaluated on the basis of race, color, national origin, ancestry, age, physical or mental disability, marital or family status, pregnancy, veteran status, service in the uniformed services (as defined in state and federal law), religion, creed, sex, sexual orientation, genetic information, gender identity, or gender expression (see BOG Policy 44 (http://bog.wvu.edu/files/d/0d9c7853-4569-4895-b2bc-6bd7f00a3eaf/policy-44-december-18-2015-amendment.pdf)), or other protected status.
2. Right to appeal any final grade, charge of academic dishonesty, or academic penalty.
3. Right to access a copy of the University catalog and program documents in which all current program requirements and standards are described (e.g. required courses, total credit requirements, time in residence requirements, special program requirements, minimum grade point average, probation standards, professional standards, etc.).
4. Right to receive course syllabi with descriptions of content and requirements for any course in which they are enrolled (e.g., attendance expectations, special requirements, laboratory requirements including time, field trips and costs, grading standards and procedures, professional standards, etc.).
5. Right to assigned grades issued from the instructor of each course to students enrolled in the course consistent with the academic rights set out in the preceding sections.

Definitions and Types of Academic Penalties

PENALTIES FOR FAILURE TO MEET ACADEMIC REQUIREMENTS OR STANDARDS

A student at West Virginia University who fails to meet academic requirements or standards will be subject to one or more of the following academic penalties:

1. A lower final grade, including failure of a course. A lower grade or failure of the course can be imposed by the course instructor/coordinator. If a student appeals a final grade, the grade shall remain in effect until the appeal is completed.
2. Exclusion of a student from further participation in class prior to any appeal proceedings requires that the course instructor/coordinator obtain approval of the dean of the college or school offering the course.
3. Required repetition or revision of a program requirement, or termination of the student's participation in specific program-related activities.
4. Failure of a program requirement or failure to meet academic standards. Program requirements and standards must be described in the catalog or other program documents provided or available to students. Program requirements may include such items as passing a qualifying exam, maintaining progress on research, developing required technical skills, or meeting professional standards of conduct (including the avoidance of academic dishonesty).
5. Academic probation or suspension at the program, college, or school level for failure to meet program requirements and academic standards, or at the university level for failure to meet grade point average standards. More information concerning probation and suspension of undergraduate students at the university level (http://catalog.wvu.edu/westvirginiauniversityinstituteoftechnology/academicstandards/#probationandsuspensiontext) is available in the Academic Standards section of undergraduate catalog. More information about probation and suspension of graduate or professional students at the program, college, or school level (http://catalog.wvu.edu/graduate/enrollmentandregistration/#probationsuspensiontext) is in the Academic Standards section of the graduate catalog as well as in program documents. If a graduate or professional student appeals a penalty of program suspension, the dean of the college or school offering the student's program will determine if the student shall be allowed to continue in the program until the case is determined.
6. Dismissal from a program, college, school or the university. Dismissal is defined as termination of student status, including any right or privilege to receive some benefit or recognition or certification. A student may be academically dismissed from any program and remain eligible to enroll in courses in other programs at the institution, or a student may be academically dismissed from the institution and not remain eligible to enroll in other courses or programs at the institution, including other divisional campuses (BOG Policy 15 (http://bog.wvu.edu/files/d/e7102743-6a83-4822-b4a3-a050e5e0711f/policy15-amended-student-academic-rights-amended-april-12-2013.pdf)). If a student appeals a penalty of program dismissal, the dean of the college or school offering the student's program will determine if the student shall be allowed to continue in the program until the case is determined. Dismissal from a program, college, or school must be communicated to the Associate Provost for Undergraduate or Graduate Academic Affairs, the Health Sciences Associate Vice President for Academic Affairs, or the divisional campus President once the time limit for a student appeal has expired or the appeal process has been completed. The Associate Provost, Associate Vice President, or divisional campus President submits a request to the appropriate office to change the student's status to non-degree. Academic dismissal from the university requires consultation and approval from the student's dean, the Associate Vice President for Academic Affairs (Health Sciences students only), and the Provost's or divisional campus President's Office

PENALTIES FOR ACADEMIC DISHONESTY

The term "academic dishonesty" means plagiarism; cheating and dishonest practices in connection with examinations, papers, and/or projects; and forgery, misrepresentation, or fraud as it relates to academic or educational matters. In addition to the definitions and examples provided below, supplementary information about types and examples of academic dishonesty is available (https://provost.wvu.edu/governance/academic-standards-resources).

1. "**Plagiarism**" means the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment, including, but not limited to, the unacknowledged use of materials prepared by another individual.
2. "**Cheating and dishonest practices in connection with examinations, papers, and/or projects**" include, but are not limited to, (i) giving or receiving of any unauthorized assistance in taking quizzes, tests, examinations, or any other assignment for a grade; (ii) depending upon the aid of sources beyond those authorized by the instructor or supervisor in quizzes, tests, examinations, writing papers, preparing reports, solving problems, or carrying out other assignments; (iii) the acquisition or use, without permission, of tests or other academic material belonging to a member of the University faculty or staff; and (iv) engaging in any behavior specifically prohibited by a faculty member in the course syllabus or class discussion.
3. "**Forgery, misrepresentation, or fraud as it relates to academic or educational matters**" includes, but is not limited to, (i) wrongfully altering, or causing to be altered, any records; (ii) use of University documents or instruments of identification with the intent to defraud; (iii) presenting false data or information or intentionally misrepresenting records; (iv) furnishing the results of research projects or experiments for the inclusion in another's work without proper citation; or (v) furnishing false statements in any University academic proceeding; and (vi) providing false or misleading information to gain an academic advantage.

A student at West Virginia University who engages in academic dishonesty will be subject to one or more of the following academic penalties (see the previous section for full descriptions of those penalties that can also be imposed for failure to meet academic requirements or standards):

1. Course-level academic penalties. When academic dishonesty occurs within the context of a course (including individually supervised courses), the course instructor/coordinator has the option of imposing the following academic penalties, including but not limited to:

a. Change in assignment or test grade.
b. A lower final grade, including failure of a course.
c. A final grade of unforgivable failure (UF). The UF penalty can be recommended by the course instructor/coordinator but must be reported to the appropriate office by the dean of the college or school offering the course after the time limit for a student appeal has expired or the appeal process has been completed, upholding the UF penalty. The student may repeat the course, but the undergraduate D/F repeat process will not be applied to the UF.
d. Required repetition or revision of the assignment or test.
e. Exclusion from further participation in class, including laboratories or clinical experiences.
f. Other course resolutions within the discretion of the course instructor/coordinator.

2. Other academic penalties. If academic dishonesty occurs either in a course or within the context of program requirements, the academic penalties below may be imposed.
   a. Required repetition or revision of a program requirement, or termination of the student's participation in specific program-related activities. When academic dishonesty occurs within the context of program requirements and expectations not associated with a specific course (including, but not limited to, completing qualifying exams, conducting research, performing duties associated with a graduate assistantship, performing required service or professional activities, etc.), the student's program director, supervisor, or chair of an appropriate committee may impose these or similar academic penalties.
   b. Failure of a program requirement or failure to meet academic standards.
   c. Academic probation or suspension at the program, college, or school level for failure to meet program requirements and academic standards.
   d. Dismissal from a program, college, school, or the university

Appeals

In this section:

GENERAL INFORMATION ABOUT APPEALS

Students may appeal any final grade, charge of academic dishonesty, or academic penalty described above and imposed by a course instructor/coordinator, the institution, or its constituent academic units through the procedures described in this section of the catalog with the following exceptions:

- Grades for individual course assignments cannot be appealed except in the context of a final grade appeal or a charge of academic dishonesty.
- University, college/school, or program probation based on failure to meet minimum GPA standards may not be appealed. University suspension of undergraduate students based on GPA may be appealed as described in the Academic Standards section of the undergraduate catalog (http://catalog.wvu.edu/undergraduate/coursecreditstermsclassification/#probationsuspensiontext).
- Disciplinary penalties imposed by the Office of Student Conduct, including but not limited to probation, suspension, or expulsion from the university, may not be appealed through this process. Refer to the Campus Student Code for procedures to appeal disciplinary penalties, including those for academic dishonesty

The primary purpose of the appeal procedure is to allow review of a final grade, charge of academic dishonesty, or academic penalty in cases where a student believes that due process was not followed or that the grade, charge, or penalty was imposed unfairly or inconsistently with course, program, and university standards and regulations. Students have the right to appeal a final grade, charge of academic dishonesty, or academic penalty that they believe reflects a capricious, arbitrary, or prejudiced academic evaluation, or reflects discrimination based on criteria listed in BOG Policy 44 (http://bog.wvu.edu/files/d/0d9c7853-4569-4895-b2bc-6bd7f00a3eaf/policy-44-december-18-2015-amendment.pdf). Additional grounds for appeal may include: unreasonable severity of the penalty; demonstrable prejudice in the decision-making process; a belief that the evidence does not support the finding of responsibility (in the case of academic dishonesty) or the choice of penalty; or additional evidence or new information that was not considered in determining the penalty. Further guidance for students on preparing an appeal (http://provost.wvu.edu/governance/academic-standards-resources) is available

If a student does not appeal a final grade, charge of academic dishonesty, or academic penalty, fails to follow the appeal procedures described below, or does not attend a scheduled meeting regarding the appeal, the final grade, charge of academic dishonesty, or academic penalty will be upheld, regardless of whether or not the student is still enrolled in the course or program

THE APPEAL PROCESS

Steps in the Appeal Process:

The following is a summary of the steps in the appeal process. In addition, a detailed list of the steps involved in each type of appeal (https://provost.wvu.edu/governance/academic-standards-resources/detailed-appeal-procedures) is available to assist students, instructors, and administrators in managing the appeal process.

- Students are notified of final grades, charges of academic dishonesty, and other academic penalties.
    - Students are informed of final grades for courses at the end of each academic term through the WVU Portal (https://portal.wvu.edu).
    - The person making a charge of academic dishonesty must notify the student in writing via WVU e-mail of the charge and penalty within 10 class days* of discovering the infraction. This person must complete the Academic Dishonesty Form (http://provost.wvu.edu/governance/academic-standards-resources) when when an academic penalty for academic dishonesty is imposed, regardless of whether or not the student plans to appeal the charge or penalty.
    - The individual or chair of the committee who imposed an academic penalty must notify the student in writing via WVU e-mail of the academic penalty.
- Prior to filing an appeal, students are strongly encouraged (but not required) to contact the individual or chair of the relevant committee who reported a final grade, made a charge of academic dishonesty, or imposed an academic penalty to express their concerns and attempt to resolve the issue. The individual or committee chair, or another informed individual, must meet with the student (p. 12) to provide information and evidence forming the basis for the grade, charge, or penalty.
- Level 1 appeal (for final grades, charges of academic dishonesty, and academic penalties):
    - The student may begin an appeal by submitting a written appeal via WVU e-mail to the Level 1 appeal reviewer named here (https://provost.wvu.edu/governance/academic-standards-resources) within the time limit provided here (p. 11). The student's appeal must include the documentation and evidence forming the basis of their appeal. In the case of a charge and/or penalty for academic dishonesty, the student may appeal the charge, the penalty, or both.
    - The individual or committee that gave the grade, made the charge, or imposed the penalty must provide all relevant documentation (including the criteria for determining the student's final grade in the case of a final grade appeal) to the Level 1 appeal reviewer upon their request.
    - The Level 1 appeal reviewer assesses the available evidence and makes a decision about the appeal based on that evidence. The reviewer communicates the decision in writing via WVU e-mail to the student and other individuals or committees that have been involved in the grade, charge, penalty, or appeal to that point. If the appeal involves academic dishonesty, the reviewer completes the Academic Dishonesty Form (http://provost.wvu.edu/governance/academic-standards-resources). The reviewer retains all documentation related to the appeal for 5 years. In the case of a final grade appeal, the Level 1 appeal reviewer ensures that a grade modification is submitted if necessary.
    - If the student accepts the Level 1 appeal decision, the appeal is concluded.
- Level 2 appeal (for final grades, charges of academic dishonesty, and academic penalties):
    - If the student does not accept the Level 1 appeal decision, the student may continue their appeal by submitting a written appeal via WVU e-mail to the Level 2 appeal reviewer named here (https://provost.wvu.edu/governance/academic-standards-resources) within the time limit provided here (p. 11).
    - The Level 1 appeal reviewer forwards all materials included in the appeal to the Level 2 reviewer. Both the student and other individuals or committees may provide additional information if they wish.
    - The Level 2 appeal reviewer assesses the available evidence and makes a decision about the appeal based on that evidence. The reviewer communicates the decision in writing via WVU e-mail to the student and other individuals or committees that have been involved in the grade, charge, penalty, or appeal to that point, including the Level 1 appeal reviewer. If the appeal involves academic dishonesty, the reviewer completes the Academic Dishonesty Form (http://provost.wvu.edu/governance/academic-standards-resources). The reviewer retains all documentation related to the appeal for 5 years. In the case of a final grade appeal, the Level 2 appeal reviewer ensures that a grade modification is submitted if necessary.
    - If the student accepts the Level 2 appeal decision, the appeal is concluded. If the appeal concerned a final grade, a charge of academic dishonesty without a penalty of program suspension or dismissal, or an academic penalty other than program dismissal, the appeal is concluded.
- Level 3 appeal (for suspension from a program for academic dishonesty or dismissal from a program):
    - If the penalty is suspension from a program for academic dishonesty or dismissal from a program, the student may continue their appeal by submitting a written appeal via WVU e-mail to the Level 3 appeal reviewer named here (https://provost.wvu.edu/governance/academic-standards-resources) within the time limit provided here (p. 11).
    - The Level 3 appeal reviewer may appoint and convene a Student Academic Hearing Committee (SAHC) to hear the case and review the appeal. In the case of an academic penalty of program suspension or dismissal based on academic dishonesty, a hearing is required. SAHC procedures follow.
        - Members are appointed to the SAHC at the discretion of the Level 3 appeal reviewer and shall comprise at least three faculty members. At least one SAHC member should be from the program offering the course or the student's program; at least one should be from outside the program offering the course or the student's program.
        - The SAHC holds a joint hearing with the student and any individuals involved in making the academic dishonesty charge or imposing the academic penalty and may also convene additional individual meetings or request additional materials to collect further evidence. The hearing is set outside of the student's scheduled classes; should the student choose not to appear, the meeting will proceed as scheduled.
        - The student may be accompanied to the hearing or meetings or be advised by a person of his or her choice from the institution. Likewise, the faculty member, academic officer, or committee recommending academic suspension (for academic dishonesty)

or dismissal may have an advisor from the institution. Such advisors may consult with but may not speak on behalf of their advisees or otherwise participate directly in the proceedings, unless they are given specific permission to do so by the individual or committee conducting the appeal.
        - In addition, for cases involving program suspension or dismissal based on academic dishonesty, the student may be accompanied to the hearing or meetings by an attorney, who may question witnesses and make arguments on behalf of the student.
        - Witnesses may be called by any of the parties involved.
        - A record of the SAHC hearing shall be prepared in the form of summary minutes and relevant attachments and will be provided to the student upon request.
    - The Level 3 appeal reviewer assesses the available evidence, including the recommendation of the Student Academic Hearing Committee, when available, and makes a decision about the appeal based on the evidence and recommendation. The reviewer communicates the decision in writing via WVU e-mail to the student, and other individuals or committees that have been involved in the charge, penalty, or appeal to that point, including the Levels 1 and 2 appeal reviewers. If the appeal involves academic dishonesty, the reviewer completes the Academic Dishonesty Form (http://provost.wvu.edu/governance/academic-standards-resources). The reviewer retains all documentation related to the appeal for 5 years.
    - The appeal is concluded.
- Disciplinary penalties for academic dishonesty: The individual or committee that charged the student with academic dishonesty, or the Level 1, 2, or 3 appeal reviewers may determine, in their judgment, that in addition to the academic penalty already assigned, the academic dishonesty rises to a level of significance warranting a potential disciplinary penalty of University probation, suspension, or expulsion. Examples of such cases and guidance in making this decision is available (http://provost.wvu.edu/governance/academic-standards-resources). In this case, they may refer the matter to the Office of Student Conduct. The Office of Student Conduct may also choose to pursue disciplinary penalties based on evidence of repeated instances of academic dishonesty by a student submitted via Academic Dishonesty Forms (http://provost.wvu.edu/governance/academic-standards-resources). The Office of Student Conduct shall then undertake student disciplinary proceedings consistent with WVU BOG Policy 31 (http://bog.wvu.edu/files/d/4c27ce4e-93b5-451b-a557-c9d8ab25a773/policy-31-dec-18-2015-amendment.pdf) and the Campus Student Code (https://studentconduct.wvu.edu). These proceedings do not affect the academic penalty. If the disciplinary proceedings under the Campus Student Code result in a finding that the academic offense does not warrant additional disciplinary penalty, the case is closed and only any academic penalty imposed and upheld through the academic appeal process will apply.

Time Limits for Steps in the Appeal Process:

- Level 1:
    - Final Grade Appeal
        - Student files initial or continuation of appeal 10 class days after grade is posted
        - Decision about appeal communicated to student 10 class days after student submits appeal
    - Academic Dishonesty Charge
        - Student files initial or continuation of appeal 10 class days after charge is sent to student
        - Decision about appeal communicated to student 10 class days after student submits appeal
    - Academic Penalty
        - Student files initial or continuation of appeal 10 class days after penalty is sent to student
        - Decision about appeal communicated to student 10 class days after student submits appeal
- Level 2 (all types of appeals)
    - Student files initial or continuation of appeal 10 class days after decision at Level 1 is sent
    - Decision about appeal communicated to student 10 class days after student submits Level 2 appeal
- Level 3 (appeals of suspension/dismissal only)
    - Student files initial or continuation of appeal 10 class days after decision at Level 2 is sent
    - Decision about appeal communicated to student at discretion of the Provost's office

*Class days are defined as days during which the University is open and classes are officially in session. If classes are canceled for the University as a whole for part or most of a day, the day will not be deemed a class day.

Communication about Appeals:

All communication with a student concerning an appeal must come directly from, or be directed to, the student. Although students and others involved in the appeal process may consult with third parties, appeals and communication about appeals should be conducted between the student and individuals or committees charged with reviewing the appeal. Communication may take place through written documents, e-mail (using official University e-mail accounts whenever possible), and direct contact (telephone, face-to-face meetings, etc.). Decisions at each level of appeal must be communicated to the student and other individuals involved with the appeal at prior levels in writing transmitted via WVU e-mail. In addition, all penalties for academic

dishonesty and the outcomes of all appeals involving academic dishonesty must be reported via the Academic Dishonesty Form (http://provost.wvu.edu/governance/academic-standards-resources).

Responsibility for Appeal Decisions:

Detailed information about which individuals or committees are responsible for handling different types and levels of appeals (https://provost.wvu.edu/governance/academic-standards-resources) is available. These individuals may refer this responsibility to a designee or to a standing or ad-hoc committee. In some cases, program, college, or school documents may provide additional guidance on who is charged with reviewing specific types of appeals. Any disagreements about who is responsible for appeal decisions will be resolved by the Associate Vice President for Academic Affairs in Health Sciences, the Associate Provost for Undergraduate or Graduate Academic Affairs, or the divisional campus President.

Evidence and Meetings Concerning Appeals:

Individuals and committees reviewing appeals may convene individual or joint meetings or request additional materials to collect further evidence. The student may be accompanied to meetings concerning the grade, charge, penalty, or appeal by a person of his or her choice from the institution. Such advisors may consult with but may not speak on behalf of their advisees or otherwise participate directly in the proceedings, unless they are given specific permission to do so by the individual or committee conducting the appeal. Note that some Level 3 Student Academic Hearing Committee meetings may allow the presence and participation of an attorney.

In this section:

Undergraduate Academic Probation and Suspension Policy

This policy concerns academic probation and suspension (referred to below as probation and suspension) from the University. Individual schools, colleges, and programs may place students on probation or dismiss them from their programs as well, using criteria that are the same as or different from those below. Students who are dismissed from a program may transfer to another program if they meet the program's admission requirements or they may be advised in the Center for Learning, Advising, and Student Success until they are able to be accepted to a program.

Any student with an overall grade point average (GPA) below 2.0 will be on probation for summer and fall. Should a student's overall grade point average (GPA) fall below 2.0 immediately following the spring term, the student will be placed on suspension regardless of previous academic standing(s).

Probation Procedures

At the conclusion of summer and/or fall, students on probation (i.e., with an overall GPA below 2.0) are sent a probation letter (via email to their MIX account from the Office of the University Registrar (OUR). This letter informs students about their academic status, explains what is meant by probation, provides information on resources available to help them improve their academic performance, and describes the consequences of continued poor performance, including the standards and procedures concerning suspension.

Suspension Procedures

At the conclusion of each spring term only, students placed on suspension are sent a suspension letter rather than a probation letter from the OUR (via e-mail to their MIX account and by post to their permanent address) and are suspended from the University effective at the end of the summer term. This letter informs students that they have been suspended from the University, explains what that means, and provides information about appealing the suspension. The letter also describes procedures for reinstatement to the University after their suspension period and the impact of taking classes at other institutions during the suspension period.

Students may also be suspended at the end of fall or summer term, as recommended to the OUR by the designated academic officer in each school or college, based on a failure to meet the provisions of a prior contract put in place for a reinstated student.

Duration of Suspension

Students who are suspended for the first time may not enroll in classes at WVU (including sections offered through Extended Learning) for the following major term (fall semester). Students suspended for a second time will not be allowed to enroll in classes at WVU (including sections offered through

Extended Learning) for one calendar year. Students suspended for a third and final time will not be allowed to return to WVU for a minimum of five years.

Appeal

Suspended students have until early June (exact date specified in written notice of suspension) to appeal the suspension by sending a request to their school or college by e-mail or post. A designated academic officer in each school or college will then have until July 1 to review the requests and to reinstate students whose appeals are approved. Students who appeal and are denied or who do not appeal their suspension will be removed from their fall classes.

Summer Enrollment

Students who are suspended for fall may enroll in summer courses at WVU (main campus, Extended Learning, Potomac State College of WVU and WVU Institute of Technology). Students who are enrolled in summer courses as of July 1 will not be removed from their fall classes until summer grades are available. Students who rehabilitate their overall GPA above 2.0 will be automatically reinstated from suspension. Colleges and schools may elect to defer a reinstatement decision as well until summer grades are available. Each college or school will communicate to the OUR the final decision on reinstatement immediately after summer grades are released. Only summer courses taken at WVU's main campus, Extended Learning, Potomac State College of WVU and WVU institute of Technology will be considered in determining eligibility for reinstatement for the fall following suspension.

Immediate Reinstatement after Suspension

Students who are suspended and subsequently reinstated following a successful appeal or a successful summer term may be retained in their major for advising.

Readmission after Serving Suspension

Suspended students who wish to be readmitted into the University after their required suspension period must contact Undergraduate Admission. Students, at the discretion of their College/School, may remain in their major at the time they leave WVU or change majors upon return. All reinstated students whose GPAs are below the suspension cutoff are given a contract that describes the conditions that must be met to avoid suspension in future terms.

Admissions

WVU Institute of Technology seeks to recruit and admit students who aspire to careers in engineering, sciences, business, humanities, social sciences, and nursing. It is important that the abilities and interests of students are appropriately matched to the rigor of Tech's academic programs. Each candidate's application, transcripts, and test results are carefully reviewed for compliance with admission standards. We assure equal educational opportunity to all. We welcome applicants without regard to race, religion, color, sex, sexual orientation, marital status, age, handicap or disability, veteran status, or national origin.

WVU Tech is subject to the undergraduate admissions policies and procedures of the West Virginia Higher Education Policy Commission (HEPC). These are described in detail in Series 23: Standards and Procedures for Undergraduate Admissions at Four-Year Colleges and Universities. (See https://www.wvhepc.org/resources/Series_23_2-7-13.pdf.)

The WVU Tech application is available online at http://admissions.wvutech.edu/. All applicants may contact the Beckley Admissions Office at 400 S. Kanawha St., Beckley, WV 25801, by calling 304.929.0311, or by email at tech-admissions@mail.wvu.edu.

Applications are processed on a rolling decision basis. Students are encouraged to apply at their earliest opportunity because applicants are considered on a first-come, first-served basis. Those who apply for the fall term before May 1 will automatically receive priority consideration for institutional scholarships.

Because some degree programs have standards that exceed baseline requirements for admission to the University, admission to WVU Tech does not necessarily constitute admission into a specific degree program.

In this section:

Freshman Students

Freshman applicants should submit the WVU Tech application, their official final high school transcript (sent directly from the high school), their ACT or SAT test scores, and proof of immunizations. The graduation date shown on the final high school transcript must precede the first day of classes of the term the student first enrolls at WVU Tech.

Courses that freshman applicants are expected to have successfully completed in high school include:

- 4 units of English (including grammar, composition, and literature)
- 3 units of social studies (including U.S. History)
- 4 units of college preparatory mathematics (three units must be algebra I and higher, Math I and higher; Transitional Math for Seniors will be accepted.)
- 3 units of science (all must be college preparatory, preferably biology, chemistry, or physics)
- 2 units of the same foreign language
- 1 unit of fine art

In addition to a 2.0 high school GPA and an 18 ACT composite or 870 SAT (combined Critical Reading and Math scores taken prior to March 2016) or a 950 SAT composite (combined evidence based Reading/Writing and Math scores taken March 2016 and after.)

In addition to the general requirements for admission, applicants to the Leonard C. Nelson College of Engineering and Sciences must also obtain an ACT math school of at least 19 or a SAT math score of 460 taken prior to March 2016 or a 500 SAT score taken March 2016 and after.)

Students who wish to pursue a career in engineering, but do not meet the above criteria for admission to the Leonard C. Nelson College of Engineering & Sciences can be admitted to the pre-engineering program. A pre-engineering student could be allowed to transfer to an engineering major after completing MATH 126 College Algebra and MATH 128 Plane Trigonometry, both with a ‘C’ or better grade.

Transfer Students: Intra-University

Students enrolled at WVU (either the Main Campus or Potomac State College) who wish to transfer to WVU Tech must: (1) submit the Change of Campus form that can be accessed at http://admissions.wvutech.edu/ or techregistrar.wvutech.edu/forms (http://techregistrar.wvutech.edu/forms); and (2) fulfill all general admission requirements and all stipulated program admission requirements. If the transfer will take place before two full semesters has been completed, the student must also fulfill all freshman admission requirements.

Transfer Students from Other Accredited Institutions

Students wishing to transfer from a regionally accredited institution must be academically eligible to return to that institution and must have earned at least a 2.0 GPA for the academic work being transferred. The official acceptance of transfer students must take place at least one month prior to the registration date for the term of their admission.

Applicants should submit the WVU Tech application, official transcript(s) directly from each college attended, and for applicants with fewer than 24 transferable credit hours (excluding developmental courses), ACT or SAT test scores and an official copy of the high school transcript.

WVU Tech is subject to the transfer guidelines adopted by the HEPC as described in Series 17: Transferability of Credits and Grades at West Virginia Public Colleges and Universities. (See https://www.wv hepc.org/resources/133-17.pdf.) Thus, WVU Tech will accept a maximum of 72 semester hours of lower-division credits and grades from public community and technical colleges or regional campuses. Additional credit from accredited four-year colleges and universities may be accepted, but the major department and the Registrar will determine which courses may apply to a particular degree.

Students with fewer than 24 transferable credit hours must meet freshman admission standards and must take the course, WVUE 191, First-Year Seminar.

All transfer students will be required to complete at least 36 hours of credit in residence at WVU Tech prior to their graduation. Transfer students in engineering programs must take at least 24 credit hours of upper division engineering courses in residence at WVU Tech, and these must include the capstone design course(s) for the particular program.

Evaluation of Transfer Credits

All credits, grades and quality points shall be entered on the permanent record card of transfer students. Courses from non-accredited colleges will be shown on the transcript, but will not be accepted for credit. An exception is that such courses may be accepted for the Regents BA degree program with the approval of the program coordinator. Evaluation of transfer credits will be approved by the Registrar.

Transfer student s must fulfill the graduation requirements of the college, including 40 hours of 300-400 level courses. Credits earned at a junior or community college may not be used to satisfy this requirement.

International Students

International students are urged to visit the WVU Tech web page for international students at http://admissions.wvutech.edu/apply/international-student. The application process and the scholarship program, that WVU Tech provides to academically qualified international students, are explained in depth. The following checklists indicate materials and documents that are required of international applicants:

- Application for Admission
- Application Fee
- Official High School Transcripts – Equivalent of cumulative 2.0 or better secondary/high school GPA on a 4.0 scale
- Original Language of Issue (Translated)
- Evaluated High School Transcripts
    - To ensure proper calculation of GPA and credit for courses taken, it is the responsibility of the Applicant to submit their academic records to an independent academic evaluator. While WVU Tech does not endorse a specific company or program, we suggest using World Education Services (www.wes.org (http://www.wes.org)). The required evaluation to have completed on your transcript s is the WES Basic Course - By - Course (with GPA & course - levels).
- Proof of English Proficiency – TOEFL – 61 or IELTS – 6.0 required
    - Students who are citizens of Canada, United Kingdom, Australia, Trinidad and Tobago, the British Virgin Islands or any other native English speaking countries are exempt from the TOEFL and IELTS requirements.
- ACT or SAT Scores – ACT composite score of 18 or SAT composite score of 870, (combined Critical Reading and Math scores taken prior to March 2016) or a 950 SAT composite (combined evidence based Reading/Writing and Math scores taken March 2016 or after) not including the writing portion
- Immunization Records
- Copy of Current Passport and/or Visa
- Financial Documentation
    - Applicant must prove they can provide adequate financial support to cover the estimated expense of studies at WVU Tech for one full year (tuition/fees, living expenses, books & supplies, personal expenses, etc.).
        - Applicant must submit official bank statement showing availability of the required amount. The statement can be no older than six months, must be translated in English and show all Amounts in U.S. dollars ($).
        - If student is being supported by a private sponsor, the sponsor must provide a letter declaring the intent of sponsorship in addition to the official bank statement.
        - If student is being sponsored by a government agency, the agency must provide official certification that the appropriate costs will be forwarded at the required level.

Transfer Applicants

- Applicants with less than 24 hours of college credit are also required to meet Freshman applicant requirements in addition to the Transfer requirements.
- Application for Admission
- Application Fee
- Official College Transcripts – 24 or more earned credit hours (equivalent to U.S. system) with a cumulative 2.0 or better college GPA on 4.0 scale Original Language of Issue, if International University Translated
- Evaluated College Transcripts
    - For international applicants from non-US schools, the required supporting documentation must include:
        - To ensure proper calculation of GPA and credit for courses taken, it is the responsibility of the Applicant to submit their academic records to an independent academic evaluator. While WVU Tech does not endorse a specific company or program, we suggest using World Education Services (www.wes.org (http://www.wes.org)). The required evaluation to have completed on your transcripts is the WES Basic Course - By - Course (with GPA & course - levels).
        - The original documents or certified (attested) copies of original documents in the original language of issue, and the official English translations of these documents
    - If applicant attended a domestic university, translation and evaluation are not required.

- Proof of English Proficiency – TOEFL – 61 or IELTS – 6.0 required
    - Students who are citizens of Canada, United Kingdom, Australia, Trinidad and Tobago, the British Virgin Islands or any other native English speaking countries are exempt from the TOEFL and IELTS requirements.
- ACT or SAT Scores – ACT composite score of 18 or SAT composite score of 870, (combined Critical Reading and Math scores taken prior to March 216) or 950 SAT composite (combined evidence based Reading/Writing and Math scores taken March 2016 or after) not including the writing portion
- Immunization Records
- Copy of Current Passport and/or Visa

Financial Documentation

- Applicant must prove they can provide adequate financial support to cover the estimated expense of studies at WVU Tech for one single term and for one full year of study (including tuition, fees, living expenses, books & supplies, personal expenses, etc.).
- Applicant must submit an official bank statement showing availability of the required amount. **The statement can be no older than six months, must be translated in English and show all Amounts in U.S. dollars ($).**
- If applicant is being supported by a private sponsor, the sponsor must provide a letter declaring the intent of sponsorship in addition to the official bank statement.
- If applicant is being sponsored by a government agency, the agency must provide official certification that the appropriate costs will be forwarded at the required level.

Application Deadlines

- Spring Term–December 1
- Fall Term–July 1

GED and TASC Students

Applicants who have completed the Test Assessing Secondary Completion (TASC) with a score of 500 on each of the five subtest categories or a General Equivalency Degree (GED) with an average standard score of 2250 (450) or above should have the following sent to the WVU Tech Office of Admissions:

- GED and TASC scores sent directly by the State Department of Education
- Transcript from high school last attended sent directly by the high school.

Applicants who earned the GED fewer than five years prior to applying must also have ACT or SAT scores sent to WVU Tech. Admission requirements for applicants who earned the GED five or more years prior to applying and have not attended another college may be waived.

Homeschooled Applicants

WVU Tech will accept admission applications from homeschooled students and those graduating from non-accredited high schools. If students are homeschooled or attended a non-accredited high school, they must submit a complete undergraduate application and SAT or ACT test scores. Homeschooled students must also submit course documentation as well as complete required courses to be eligible for admission. Immunization records must also be submitted before enrollment.

Homeschooled students must submit typed documentation (a manuscript or description) of their coursework. Minimally, this must include:

- The student's name.
- A list and description of courses completed. Descriptions should include duration of study and content of the course.
- Grades earned for the courses completed.
- The number of credits earned for each course.
- Graduation date.

The courses must be broken down by 9th, 10th, 11th, and 12th grade years. The transcripts must bear the signature of the person who administered the curriculum.

Homeschooled applicants and applicants who attended non-accredited high schools must furnish documentation to validate learning in the academic core areas shown below. If the student completed units at an accredited high school or college, then transcripts of the units taken must be provided to WVU Tech.

The following high school unit requirements must be met for freshman admission:

- 4 units of English (including grammar, composition, and literature) 4 units of college preparatory mathematics (three units must be Algebra I and II and Plane Geometry.) Students interested in majors that emphasize math and science are encouraged to take math beyond Algebra II (such as pre-Calc, Calculus, and Statistics).

- 3 units of social studies (including U.S. History)
- 3 units of science (ALL units must be laboratory science.) Recommended units include: Biology, Chemistry, Physics, Anatomy, and Environmental Science
- 2 units of the same foreign language. American Sign Language is acceptable.
- 1 unit of fine arts (such as: Music, Band, Art, Theater, Dance, Drama, and Performance).

Upon completion of an application file with the required documentation, WVU Tech will review the entire application file of an individual who has been homeschooled or attended a non - accredited high school. Note: West Virginia residents who were homeschooled and are applying for WV PROMISE Scholarship or WV Higher Education Grant must have GEDs or TASC scores. Further questions regarding this should be directed to the WV Higher Education Policy Commission at http://wvhepc.edu/.

ACCESS (Attaining College Credits and Experiences while in Secondary School)

High school juniors and seniors may earn credit hours toward a degree at WVU Tech prior to their graduation. To be eligible for ACCESS admission, the high school junior or senior must:

- Complete the application for ACCESS Admission
- Submit a high school transcript
- Submit a letter of permission from your parent(s) or guardian(s)
- Submit a letter of recommendation from the guidance counselor or principal of the high school attended
- Have completed the sophomore year of high school
- Have earned a minimum average of B (3.00) for all high school courses attempted

Students selected for ACCESS admission may enroll for any freshman level class as long as the student has a sufficient academic background. Students enrolled under this program will receive grades and quality points as earned. Transcripts will be forwarded to any other college upon request of the student; however, the acceptance of these credits toward a degree will be determined by the individual college. Tuition and fees will be the same as those for regular college students.

Advanced Admission of High School Seniors

High school students who wish to spend their senior year at WVU Tech may apply for advanced admission as a full-time student. To be eligible for full-time advanced admission, the high school senior must:

- Complete an application for advanced admission as a full-time student
- Submit a high school transcript and ACT or SAT test scores
- Submit a letter of permission from your parent(s) or guardian(s)
- Submit a letter of recommendation from the guidance counselor or principal of the high school attended
- Have completed all requirements for graduation from high school except senior English
- Have earned a minimum average of 3.5 GPA or higher and a 26 ACT composite or 1170 SAT (combined Critical Reading and Math scores taken prior to March 2016) or a 1240 SAT Composite (combined evidence based Reading/Writing and Math scores taken March 2016 and after.)

Accepted students are admitted as full-time students with all of the rights and privileges offered other students. Cost of tuition and fees will be the same as those for all other full-time students.

Early Enrollment Students

Agreements are in place with several high schools in West Virginia by which students may enroll in selected college courses that also satisfy requirements for high school graduation. High school students who are interested in these early enrollment classes may obtain information about them from the high school counselor or the WVU Tech Office of Admissions.

Veterans

WVU Tech is approved by the WV Higher Education Policy Commission's State Approving Agency for enrollment of veterans and dependents of deceased or 100% disabled veterans eligible for education benefits under current regulations. Those serving in the Army or Air National Guard or those on Active Duty or serving in a Reserve Unit may also qualify for educational assistance. The Office of the Registrar serves as the official institutional contact point for military and veterans' programs and services.

New students who have not used their VA educational benefits must apply to the U.S. Department of Veterans Affairs and/or their National Guard or Reserve Unit to establish their eligibility for educational benefits. Those receiving funding through the U.S Department of Veterans Affairs must submit a Certificate of Eligibility and those funded under WV National Guard programs must submit a Notice of Basic Eligibility to the Veterans Affairs Office in order to be certified for educational benefits. Transfer students who have used educational benefits at another school must contact the Veterans Affairs Office and submit a Change of Program or Place of Training Form to receive benefits. All transfer credits must be reported to the Veterans Affairs Office and official transcripts must be submitted to the Office of Admissions. The student must also officially apply for WVU Tech admission and

select a VA approved academic program before being certified to receive educational benefits. These guidelines also apply to students who are only enrolled in Extended Education courses. Continuing students need only verify their continued enrollment with the Veterans Affairs Office to continue their educational benefits. Please see http://techregistrar.wvutech.edu/forms.

It is the student's responsibility to ensure that all tuition and fees are paid, unless they are enrolled under the Post 9/11 GI Bill (Chapter 33). Educational benefits checks should start arriving within 6 to 8 weeks after certification.

Any changes in approved course schedules including adding, dropping, and withdrawing from a course or courses MUST receive prior approval from the Veterans Affairs Office. Failure to obtain prior approval may jeopardize continued funding and may result in a significant overpayment of educational benefits that must be repaid to the VA. Students withdrawing from the institution must also contact the Veterans Affairs Office to avoid any overpayment. Any overpayment of education benefits will be calculated within the pay period in which the change occurred. Changes of academic program major MUST receive prior approval from the Veterans Affairs Office and U.S. Department of Veterans Affairs or appropriate Guard or Reserve Unit.

Students receiving educational benefits are expected to make satisfactory progress in attaining their educational goals and to attend their classes on a regular basis. The Veterans Affairs Office will closely monitor academic progress and class attendance. Any student not following these requirements may lose their benefits.

All forms necessary for educational benefits are available in the Office of the Registrar: Phone 304.929.0337 (Beckley) – E-mail: Tech-Veterans-Affairs@mail.wvu.edu. (Tech-Veterans-Affairs@mail.wvu.edu)

In this section:

Regents Bachelor of Arts (RBA)

RBA Students need to complete the general WVU Tech admissions application. There are no application fees. For details, please see http://bhss.wvutech.edu/departments/regents-bachelor-of-arts.

WVU Tech's Regents Bachelor of Arts (RBA) degree program is designed for adults who want to complete their college studies and obtain a bachelors degree. The program is affordable, flexible, and offers an opportunity to gain credits for work and life experience. Students tailor their academic course of study to meet individual needs.

Transient Students

A student wishing to take WVU Tech courses for transfer to another college may do so but, when registering, must present an official transient student permit from the college accepting the credits. This permit should include the number of semester hours permissible for transfer. The total cost of tuition and fees for the transient student is the same as that paid by regular WVU Tech students. Students from the WVU Morgantown campus or Potomac State College must complete a Dual Campus form if they will also be taking classes at their home institution, or a Change of Campus form if all courses during the term will be taken at WVU Tech. Forms can be found at http://techregistrar.wvutech.edu/forms.

WVU Tech students who wish to take courses at another institution for credit toward a WVU Tech program must meet with their advisor and complete a Transient Student Form. This form indicates the courses to be taken at the other institution and the course equivalencies when transferred to WVU Tech. This form must be submitted to the Office of the Registrar before the student attends another institution. If the student will be taking courses at WVU Morgantown campus or Potomac State College, they must either complete a Dual Campus form if they will also be taking classes at WVU Tech, or a Change of Campus form if all courses during the term will be taken at another campus. Forms can be found at http://techregistrar.wvutech.edu/forms.

Special Students

An individual who wishes to take courses, but not for a degree or certificate, is classified as a special student and may register for part-time studies, taking fewer than 12 hours of course credit in any semester. A special student who attempts 12 or more credit hours must apply for admission as a degree candidate by filing full credentials with the Office of Admissions. An overall grade point average of 2.00 or higher is required for admission. The tuition and fees for the special student is the same as those paid by regular college students.

An exception to this policy is granted to CTED students who are taking courses for certification for continuing employment, but who are not seeking a degree. These students are admitted under the 049T Career Technical Education Certificate major code, and are not bound by the 12 hour limit on special students.

Academic Common Market

The Academic Common Market provides opportunities for residents of other states that are members of the Southern Regional Education Board to attend selected programs in West Virginia at reduced tuition rates. Application must be made through the higher education authority of the state of residence. Depending upon the state of residence, the WVU Tech Athletic Coaching Education and Aerospace Engineering 2+ programs are available through the Academic Common Market Program.

Visit http://admissions.wvutech.edu/cost-and-aid/academic-common-market for details on the application process.

Readmission of Students in Good Standing

Students who left WVU Tech in good standing and who return to college after an absence of one or more terms, excluding summer, must apply for readmission.

Readmission of Suspended Students

First-level suspension is assigned when the student's GPA falls below 2.0 for two consecutive semesters. The student on first-level suspension may request a waiver from the Dean of the college in question by way of written request and agreeing to an academic load not to exceed 14 credit hours. In cases when the waiver request is not approved, first-level suspension requires that the student sit out for a minimum of one semester before reapplying to WVU Tech.

Second-level suspension is assigned when the student returning from a first-level suspension fails to earn a 2.0 GPA in the next attempted semester. Second-level suspension cannot be waived and requires that the student sit out for at least one year before reapplying.

Third-level suspension is assigned when the student returning from second-level suspension fails to earn a 2.0 GPA in the next attempted semester. Third-level suspension cannot be waived and requires the student to sit out for at least four years before reapplying.

A student suspended at any level is entitled to petition the Committee on Classification and Grades of the Faculty Assembly for readmission. The Committee will evaluate the academic ability, character, circumstances, motivation, and any evidence presented by the student of improved circumstances or conditions that would support the application for readmission. If the Committee approves the petition, the student will return on academic probation and under whatever special circumstances the Committee deems advisable. The student would thus not have to reapply.

It is important to note that readmission to the college does not automatically mean readmission to the previous program.

In this section:

Advanced Placement Program (AP)

Academically qualifying high school juniors and seniors may earn college credit through the AP program of the College Entrance Examination Board. At the completion of the AP courses three-hour examinations will be administered. The final scores on the exam may demonstrate equivalency to selected WVU Tech courses. Details about the AP program are posted on the HEPC web page under academic affairs at www.wvhepc.edu/ (http://www.wvhepc.edu)

College Level Examination Program (CLEP)

Incoming students who have gained a significant level of maturity through life experiences may receive college credit for their educationally-related experiences through the CLEP programs of the College Entrance Examination Board. Up to 35 hours of general education or elective credit may be earned through successful performance on CLEP general examinations. Although this program was designed primarily for adults, exceptionally well qualified high school seniors may elect the CLEP program. Courses for which credit may be earned through CLEP examinations are listed online at http://admissions.wvu.edu/admissions/equivalency.

International Baccalaureate (IB)

WVU Tech welcomes applications from students who have attended high schools that offer the international baccalaureate program. Credit given varies with level (standard or higher) and with score. The chart can be found at http://admissions.wvu.edu/admissions/equivalency.

Academic Forgiveness

WVU Tech allows academic forgiveness to some students who were not successful in their prior experiences at West Virginia colleges and universities. To be eligible the student cannot have been enrolled in any higher education institution for the four years prior to their admission to WVU Tech.

The petition for academic forgiveness is available on the Registrar's web page at: http://techregistrar.wvutech.edu/policies-and-procedures. The following conditions and rules apply:

- The request for academic forgiveness must be submitted during the term i n which the student is initially readmitted. Assuming that all requirements are met, academic forgiveness would become effective on completion of the readmission semester.
- The official recommendation for academic forgiveness must be approved by the dean of the college the student plans to enter.
- Upon admission to WVU Tech under this policy, the student will receive credit for all courses completed with a grade of D or higher.
- The student admitted under the academic forgiveness policy must satisfactorily complete all coursework required by the respective program and academic college.
- Under no circumstances may the student admitted under the academic forgiveness policy complete fewer than 32 credit hours at WVU Tech prior to earning a degree.
- Students admitted under the academic forgiveness policy are expected to complete the required course work at WVU Tech. Any exceptions must be submitted to the department chair in writing.
- A student admitted under the academic forgiveness policy is subject to all regulations regarding probation, suspension, and expulsion.

If the application is approved, the changes will be applied to the student's WVU Tech credits and transfer credits as applicable. Academic forgiveness is applied by excluding the GPA hours for which an "F" was earned. The "F" grades will still appear on the transcript, however, forgiven "Fs" will have an "E" notation and the hours will no longer appear in the GPA hours and will not be used in the calculation of the GPA. This can be viewed through the MIX/STAR academic transcript online once processed.

This policy pertains only to the calculation of the GPA required for graduation and does not pertain to GPA calculated for special academic recognition (such as graduation with honors) or to requirements for professional certification which may be within the province of licensure boards, external agencies, or the West Virginia Board of Education.

Academic Forgiveness for Regents Bachelor of Arts (RBA) Students

It is not necessary for students admitted to the RBA program to petition for academic forgiveness. WV HEPC policy (Regents Bachelor of Arts Degree Program Administrative Guidelines revised April 2007) dictates that all "F" grades received four years or more before admission to the RBA program are disregarded. Also, the only residence requirement for RBA students is that 24 credit hours must be earned within the state higher education system, including the community and technical colleges. At least 3 of the 24 graded hours must be completed at WVU Tech.

Developmental Courses

Developmental courses do not count toward Tech's degree requirements or GPA calculations.

Student Life and Services

In this section:

Division of Student Life

The Division of Student Life is responsible for programs and services designed to help students achieve their educational goals. Departments under the Student Life umbrella include the Dean of Student's Office, Student Activities, Student Government Association, University Police, Student Health and Counseling Services, Accessibility Services, Career Services & Cooperative Education, the Student Success Center, Student Support Services, Upward Bound, Residence Life, and Dining Services. The Division of Student Life is located at 505 S. Kanawha St. Beckley, WV 25801 on the Beckley campus. For more information about student life at WVU Tech, please call the Dean of Students Office at 304.929.1232 or visit http://students.wvutech.edu/.

Student Code of Conduct

Students and student organizations at WVU Tech are free to exercise their fundamental and constitutional rights, but in doing so are required to conduct themselves responsibly within the context of the university community. Because student status neither abridges nor extends the rights and responsibilities afforded by local, state, and national law, students are expected to abide by the rules and regulations WVU Tech sets forth governing their conduct. These are delineated in Policy 31 (http://bog.wvu.edu/files/d/4c27ce4e-93b5-451b-a557-c9d8ab25a773/policy-31-dec-18-2015-amendment.pdf): University Student Conduct Code, which was adopted by the West Virginia University Board of Governors on August 12, 2013, and which is described in the 2017-2018 Bearfacts. A copy of the Bearfacts may be accessed on line at http://students.wvutech.edu/.

Campus Life Office

WVU Tech strives to provide students with a memorable college experience through healthy and supportive social, recreational, and educational programs.

The Campus Life Office oversees the registered student organizations that cater to diverse interests (the professions, Greek life, faith, athletics, student government, and health care, among others). Active membership in student organizations affords opportunities to expand friendships, develop professional networks, pursue personal interests and hobbies, and cultivate talents as leaders and project managers. The Student Activities Office also provides student ID cards, registers students in clubs, and manages Tech Center room reservations.

The Campus Life Office is located at 305 Learning Resource Center (LRC) on the Beckley campus. Details about programs and services are posted at http://students.wvutech.edu/.

Student Government Association (SGA)

The Student Government Association (SGA) is made up of students who are chosen in campus - wide elections held each spring. One of the SGA's most important functions is developing a budget by which student activity fees are appropriated to the many activities and organizations found on campus. 19 In addition to these financial responsibilities, SGA appoints student representatives to serve on most of the committees of Faculty Assembly, including publications, social activities, discipline, financial aid, academic affairs, athletics, and alumni activities. Residence halls are self - governed through residence hall councils. Students are responsible for managing their operations, social activities, and care. Fraternal organizations affiliated with WVU Tech maintain their own governing bodies. Information about student organizations may be accessed online at http://students.wvutech.edu/.

University Police

University Police provides patrol-protection to all WVU Tech campus property including, classrooms, laboratories, parking lots, and residence halls. WVU Tech officers are vested with full police powers and responsibilities identical to the local sheriff. Officers are responsible for public safety services including crime reports, investigations, traffic accidents, fire emergencies and enforcement of local, state and federal laws requiring police assistance.

The WVU Tech Police Department located at 313 South Kanawha Street on the Beckley campus. For details about campus police services, visit http://students.wvutech.edu/campus-safety.

Residence Life

Because living on campus helps students both strengthen their college connections and achieve better academically, WVU Tech requires all first- and second-year students who have completed fewer than 59 credit hours (including transfer credits) to live in University housing. The few exceptions to this policy, which must be verified, are:

- Students who will be residing with parents who live within commuting distance (50-miles radius of campus)
- Married students
- Students with children for whom they are the primary care-giver
- Students who are 21 years of age and older, and
- Students that are veterans

Given the demonstrated benefits of living on campus WVU Tech also strongly encourages upper-class students to live on campus as well. Complete information about on-campus living, as well as policy and procedures governing campus housing are posted online at http://housing.wvutech.edu/. Residence Life is located at 305 Learning Resource Center (LRC) on the Beckley campus.

Dining Services

WVU Tech Dining Services provides a variety of culinary options in an inviting and lively environment in the Bears' Den. Dining Services provides high-quality customer service, uses the finest products, and operates three dining venues on campus to meet the demands of busy WVU Tech students. Students living in WVU Tech operated residence halls are required to enroll in a resident student dining plan as an integral part of the on-campus living experience. Details about dining options, meal plan requirements, and more services may be accessed online at http://dining.wvutech.edu/.

Athletics

WVU Tech supports numerous intercollegiate competitive sports. For men, WVU Tech offers baseball, basketball, cross-country, golf, soccer, swimming, track & field, and wrestling. For women, WVU Tech offers basketball, cross-country, soccer, softball, swimming, track & field, and volleyball. WVU Tech is a proud member of the National Association of Intercollegiate Athletics (NAIA), River States Conference and Appalachian Athletic Conference (AAC).

For more information about athletics, please visit http://goldenbearathletics.com/.

Identification Card

Student Identification Cards are required of all students and are used for library privileges, admission to athletic events and facilities, social activities, student health services, and other college functions.

Student ID Cards may be obtained free of charge in the Office of Campus Life, at 305 Learning Resource Center (LRC). There is a fee of $20.00 to replace lost or mutilated cards. To obtain or replace a student identification card, please call 304.929.1232.

Student Organizations

WVU Tech extends recognition to a wide variety of student organizations; permitting students to join together to pursue common interests. Organizations on the Tech campus include fraternities, sororities, professional, and special interest groups. For a list of organizations, please visit the Student Life website at http://students.wvutech.edu/ or contact the Office of Campus Life at 304.929.1232 located at 305 Learning Resource Center (LRC).

Bookstore

The bookstore at WVU Tech is managed by Barnes & Noble, Inc. This affiliation enables Tech to offer both new and used print textbooks, the eTextbook option, textbook rentals, and a wide variety of merchandise. The bookstore is located on the library level of the Learning Resource Center and is open on business days year-round. For more information about the WVU Tech Bookstore call 304.929.1360. You can access the online bookstore at wvutech.bncollege.com (http://wvutech.bncollege.com/webapp/wcs/stores/servlet/BNCBHomePage?storeId=15051&catalogId=10001&langId=-1).

Beckley Campus Library

The library provides volumes, electronic resources, and study spaces. The Beckley Campus Library is located on the 2nd floor of the Learning Resource Center (LRC), at 512 South Kanawha Street. For more information, please visit https://lib.wvu.edu/beckley/.

Students Called to Serve in the Military

1. Students who withdraw from the University for military service up to and including the 12th week of the semester will receive a full refund of their fees and be administratively withdrawn from their classes. No course grades or credit will be awarded.
2. Students who leave the University for military service after the 12th week of the semester should work with the designated contact person in their home college (usually the academic associate/assistant dean). The student may also contact the WVU Tech Registrar's Office at 304.929.1450. The contact person will assist the student in reviewing the student's eligibility for credit for their courses on a course-by course basis with the instructors.
3. The contact person will work with the student's instructors to gather grade information for the student. If the course is not in the student's home college, the contact person can work with his/her counterpart in the appropriate college. Several outcomes are possible:

    - If the course is substantially complete and the student has done passing work, the student should receive the grade earned at that time. It is anticipated that this would be the outcome in the majority of the courses. **NOTE: Students who receive orders with sufficient advance notice are expected to notify their professors of their upcoming deployment date and meet with their professors to come to an agreement on what regular course assignments they can reasonably complete prior to the deployment date (the details of this arrangement should be included in a contract initialed by both the instructor and the student; contracts must be placed in the student's file). Students should not be penalized for not completing assignments, quizzes, tests, or exams due after their deployment date.**
    - If a critical competency has yet to be covered in a competency-based course, the instructor should award a grade of "I" and work with the student to develop a plan to complete that critical part of the course. To alleviate confusion at a later date, the plan should be in writing and signed by both the instructor and the student. Students called to active duty for a relatively short duration that includes exam week may arrange for an "I" with provision to make up the final exam after completing the period of duty.
    - If the student chooses to withdraw from the course. the contact person will work with the appropriate University office to provide an administrative withdrawal.

LEAVE FOR MILITARY DRILL

In accordance with the “Veteran Friendly” designation, WVU faculty may allow students who are members of the US Armed Forces (including the National Guard and Active Reserve) to make up tests and assignments that are missed during a semester if the student is officially called up for military service requirements for a limited period and if the delayed coursework completion will not irreversibly impact the student’s ability to appropriately master the required subject matter. Absence due to required military obligation should not exceed a cumulative amount of three weeks. Students should notify faculty members of the circumstances of their absence as far in advance as possible and work with faculty members to agree upon a plan of action for completing course requirements.

Tech Adventures

Tech Adventures offers students opportunities to experience outdoor recreation activities as part of the co-curricular program at WVU Tech. Launched in July 2016, the program offers first year students outdoor orientation programs, outings, seminars, outdoor equipment rental and trip planning resources. Activities vary from semester to semester and include hiking, rock climbing, paddling, mountain biking and winter sports at the many regional parks and forests of central West Virginia. The program offers students the opportunity to challenge themselves to reach new heights both physically and mentally, visit new places, learn outdoor skills and make new friends. Programs are led by program staff and local guide services. In addition to co-curricular activities, Tech Adventures is partnering with the College of Business, Humanities and Social Science to offer academic courses in Adventure Recreation Management. For more information about Tech Adventures, call 304.929.0327, email TechAdventures@mail.wvu.edu or visit http://techadventures.wvutech.edu/. Tech Adventures Office is located at 704 South Kanawha Street, Beckley, WV 25801.

First-Year Seminar (WVUE 191)

Under the aegis of academic affairs, the first-year seminar is a required one-credit course for all first-time, full-time first year students and full-time transfer students who enter with fewer than 24 credit hours. This course is designed to assist new students in making a smooth transition to the Tech community, and it includes units in goal setting, learning preferences, critical thinking, information literacy, and communication, among others, all of which are essential to successfully completing the all-important first semester. Instruction is provided by members of the faculty and student life personnel. Guest experts are occasionally invited as speakers. Students have an opportunity to establish early relationships with faculty in their academic departments and confer with their academic advisors to develop short- and long-range academic and career plans.

In this section:

Student Health Services

Student Health Clinic is conveniently located in the Life Sciences Building, Suite 108 and is open to all students for walk-in and by-appointment visits. From allergy shots and immunizations to doctor referrals, sports physicals and checkups, the clinic offers a full suite of essential medical services to keep students healthy and productive. Clinic visits are free of charge. Students with chronic health issues should schedule an initial visit so the clinic may establish a treatment plan for emergency situations. For details about the Beckley campus Student Health Clinic, please call 304.929.1241, email TechStudentLife@mail.wvu.edu, or visit http://students.wvutech.edu/health-wellness/student-health-clinic.

Accessibility Services

As a division of West Virginia University, WVU Tech partners with the main campus, to help WVU Tech students achieve success regardless of any physical, learning, psychological, sensory or other documented disability in compliance with guidelines of the Americans with Disabilities Act (ADA), Section 504, of the Rehabilitation Act of 1973, and current case law. For more information about available services, call 304.929.1232, email TechStudentLife@mail.wvu.edu, or visit http://students.wvutech.edu/accessibility.

Career Services and Cooperative Education and Internship Programs

The Career Services and Cooperative Education office provides students with career development and employment services to meet their educational and professional goals.

- Golden Bear TRAK - Online career management system provides employment and internship/co-op opportunities, career development workshops, career fairs, resume distribution, and networking.
- Career Coaching and Advising - One-on-one help with choosing the right career and the right academic major. Career services also provides access to free career assessments.
- Career and Job Fairs - Career Services hosts multiple events throughout the academic year to connect students to employment opportunities.

- Graduate and Professional School information - Assistance in selecting a graduate school, writing personal statements and information GRE, GMAT, LSAT, MCAT, TOEFLE, and TSE examinations.

Through cooperative (co-op) and internship programs, students may:

- Earn money to finance their college education
- Explore career opportunities
- Enrich their classroom learning through real-world experience
- Accumulate actual career-related work experience
- Enhance their marketability after graduation
- Establish valuable professional contacts
- Improve their communication and interpersonal skills

Students who elect cooperative education (co-op) program alternate longer periods of full-time study with periods of full-time paid employment. They are also required to commit to a minimum of three work periods. Students who elect the internship program gain the same valuable paid work experience but for shorter periods of time, usually one or two weeks.

Career Services and Cooperative Education Office is located in the Student Life House at 505 S. Kanawha Street. For more information: Call 304.929.1232, email: techcareerservices@mail.wvu.edu, or visit http://careerservices.wvutech.edu/.

Counseling Services

A student's time at WVU Tech may be filled with transitions, self - exploration and change. Whether a full - or part - time residential or commuter student, WVU Tech wants to help students complete their education. Services and programs are designed to support students through these experiences, help students succeed in college and guide them toward a more fulfilling life. Services are provided in an atmosphere that is welcoming, comfortable and multiculturally sensitive for all students, faculty and staff.

Counseling Services is located in the Student Life House at 505 S. Kanawha Street. For more information: Call 304.929.1232, email TechStudentLife@mail.wvu.edu, or visit http://students.wvutech.edu/health-wellness/counseling.

Student Success Center

Opened in April 2013, the Student Success Center (SSC), located in the Robert C. Byrd Learning Center, is a powerful tool in every WVU Tech student's academic success toolbox. The SSC provides academic advising for first-year students and free peer tutoring and skill building workshops for all WVU Tech students. The SSC also plans and executes new student orientation, a multi-day program designed to assist new students to transition smoothly to the WVU Tech community. Among the most popular destinations on campus, the SSC proudly hosted more than 12,000 student visits during its first year of operation.

The SSC is also a quiet and comfortable place to study, hang out with friends or grab a quick snack. The SSC Vending Café provides delicious meals and snacks on the go. Students can use their meal plans to make purchases at the Café. The Student Success Center at WVU Tech is dedicated to providing programs and advice to students from orientation to graduation. For more information about the SSC, call 304.929.0346 or visit http://studentsuccesscenter.wvutech.edu/.

Student Support Services

Student Support Services (SSS) is a federally funded TRIO program through the United States Department of Education. It is designed to assist eligible WVU Tech students on their path toward degree completion. Services provided include but are not limited to academic, career, financial aid and graduate school advising as well as professional and peer tutoring, peer mentoring, workshops, computer lab with free printing, career opportunities and cultural activities. Services are provided free of charge to those who qualify.

Eligibility requirements for SSS include:

- U.S. citizenship
- Enrolled full time at WVU Tech

And one or more of the following:

- First generation college student (neither parent received a four year degree) Pell eligibility
- Verification of a documented disability through the West Virginia University Office of Accessibility Services.

Students can apply at any time during their undergraduate career at Tech, regardless of the semester. Participation in the program is on a first-come, first-served basis.

For more information about the services and operations of the SSS program please contact the program at 304.929.1293 or Tech-SSS@mail.wvu.edu. Applications can also be picked up in the SSS at 305 Learning Resource Center (LRC) on the Beckley campus. Please visit our website at: http://trio.wvutech.edu/.

Expenses, Payments, Refunds and Financial Aid

Statement on Educational Expenses

Educational expenses for which to plan include tuition, programmatic fees, student activities fees, room, board, and books. The schedule of costs for the current academic year at WVU Institute of Technology is available online at http://admissions.wvutech.edu/cost-and-aid/tuition-fees-and-other-costs.

The student enrolled in 12 or more credit hours is classified for purposes of tuition and fees as a full-time student. The student enrolled for fewer than 12 hours is classified for purposes of tuition and fees as a part-time student. The student who audits a course does not receive academic credit, but is charged the same as if the course was being taken for credit.

Personal expenses, such as transportation and entertainment, are over and above costs assessed by WVU Tech.

Statement on Residency Policy for Purposes of Tuition and Fees

Legal residents of West Virginia pay “resident” tuition at WVU Tech, and residents of other states and nations pay “non-resident” tuition. Residency policy is established in the WV Higher Education Policy Commission Series 25 (http://catalog.wvu.edu/westvirginiauniversityinstituteoftechnology/expensesandfinancialaid/HEPC-Series-25-Residency-Final-File-SOS-2017-05-09-1.pdf).

Students who believe they have been incorrectly classified, with respect to residency or who have h ad a change of status that affects their residency, may submit a petition for reclassification to the Provost. Appeals may be approved at that office or referred to the Residency Committee for further consideration. Appeals that are unsuccessful at that level may be taken to the President as the final level of appeal. The Residency Reclassification Appeal (http://catalog.wvu.edu/westvirginiauniversityinstituteoftechnology/expensesandfinancialaid/RESIDENCY_RECLASSIFICATION_APPEAL.pdf) form can be found on the Forms Page of the Registrar's website. It is important that petitioners include all requested documentation with the appeal form.

Statement on Paying Expenses

Student accounts may be paid online by electronic check or credit card through the West Virginia University STAR information system. Account details (current charges, payments previously made, and anticipated credits from financial aid and other third-party sources) are available at https://portal.wvu.edu/ (requires MIX ID and password).

Student accounts may also be paid by mail or in person at the Cashier’s Office at the Beckley Student One Stop Shop (Administrative Office) on the third floor of the Learning Resource Center. WVU Tech accepts payments by cash (do not send cash through the mail), check (payable to WVU Institute of Technology and bearing the Student ID number), money order, or cashier’s/bill pay check. Please note that a 2.25% processing fee will be added to all credit card payments beginning July 1, 2015.

Payments by check, money order, or draft are subject to the Non - Sufficient Funds Check Policy, a copy of which is available in the Cashier’s Office. A service charge of $25.00 is assessed for each check returned unpaid by the bank upon which it was drawn, unless the student can obtain an admission of error from the bank. If the check returned by the bank 39 was in payment of tuition and registration fees, the Cashier’s Office will declare the fees unpaid and registration cancelled. The return of the check unpaid constitutes late registration and a late fee may be levied. In such case, the student may be reinstated upon redemption of the unpaid check and payment of the $25.00 insufficient fund check assessment. The service charge on an unpaid, returned check is subject to change in accordance with state law. Please review Tuition and Fee Payment Schedule for important deadlines at: http://www.wvutech.edu/current_students/paymentschedule.

WVU Tech’s offers a convenient, low cost payment plan option called TuitionPay which is administered by Higher One. TuitionPay is a monthly installment payment plan that spreads the student’s tuition and fees over several months, interest free. There is a small enrollment fee based upon the type of plan that is chosen. To enroll in TuitionPay, please visit the following link: https://tuitionpay.higherone.com/TuitionPay/Welcome.aspx.

A 1.5% late fee will be assessed on all outstanding balances greater than and including $200 on the second day of each month. Therefore, it is important to allow 5-7 business days for payments to be received and posted.

Arrangements for payment from officially accepted scholarships, loan funds, grants, or contracts should be completed prior to the start of classes. Please refer to the academic calendar for specific dates.

Third-party billing may also be arranged. Should the third-party sponsor not pay all assessed charges, the student is responsible for paying the difference by the due date.

WVU Tech will withhold academic transcripts, diplomas, and official reports about the student’s record as long as the student has unpaid financial obligations to the Institution.

Students in debt for a previous semester or term are not permitted to register until all obligations have been paid.

The complete description of billing and payment options may be accessed at http://studentaccounts.wvu.edu/billing.

In this section:

Refunds of Tuition and Fees for Dropped Classes

If a student drops one or more classes the first week of the semester and has fewer than 12 hours after the drop, the following refund policies apply:

- Tuition, special, and refundable miscellaneous fees are refundable at 100% for the dropped classes during the first week of classes only.
- Refunds of tuition and fees for summer terms will be prorated based on the part of term.
- Laboratory fees are refundable at 100% during the first week of classes only and nonrefundable thereafter.
- Miscellaneous fees that are nonrefundable include transcript fee, graduation fee (if graduating), late payment fee, and reinstatement fee.

Classes dropped after the first week of the term will not be eligible for any refund of tuition and fees, including laboratory fees.

Refunds of Tuition and Fees for Withdrawal from the University

The student who officially withdraws from WVU Tech is eligible for a prorated refund of tuition, special fees, and certain miscellaneous fees, based upon the date of withdrawal. To withdraw officially and receive a refund, the student must submit a completed withdrawal form, available at the Office of the Registrar or on-line at http://techregistrar.wvutech.edu/forms. Every effort is made to process refunds within 30 days.

Refund schedules of tuition and fees for official withdrawal are determined by the WV Higher Education Policy Commission, and for the fall and spring semesters are posted online at http://studentaccounts.wvu.edu/refunds.

Refund periods for the summer semester, which are considerably abbreviated, are posted online at http://studentaccounts.wvu.edu/refunds.

Laboratory fees are refundable during the first week of classes only. Nonrefundable fees include the transcript fee, graduation fee (if graduating), late registration/payment fee.

Exceptions to the refund policy for withdrawal from the University include:

- Students entering the armed services of the United States may be granted full refund of refundable fees (but no course credit) if the call comes before the end of the first three - fourths of the semester. If the call comes after that, full credit for courses may be granted if the student has passing grades at the time of departure. Students must submit a copy of their deployment orders to the WVU Tech Office of the Registrar.
- Students withdrawn administratively due to catastrophic illness or death will be provided a refund as approved by the Dean of Students or a designee.

Questions about WVU Tech's refund policies should be directed to the Cashier's Office.

If a student receives financial aid and withdraws, then the student will be subject to the Refund and Repayment Policy. Federal regulations require that WVU Tech calculate eligibility for students who completely withdraw or are dismissed before completing the enrollment period. Students who receive all unsatisfactory grades (defined as at least one “F” and no passing grades) at the end of the grading period will be considered as unofficially withdrawn at the semester mid-point unless documentation is available that demonstrates continued class participation. Application of this policy may result in the necessity for a student to return financial aid funds to various Title IV federal aid programs.

A student earns Title IV federal aid based upon the length of time the student remains enrolled during the enrollment period. Students who withdraw on or before completing more than 60% of the semester may be required to return a portion of federal financial assistance. The determination of 60% of the term is computed by dividing the total number of calendar days in the term into the number of calendar days completed as of the date of withdrawal. Scheduled breaks of five consecutive days or more are excluded. The percentage of Title IV assistance which the student has earned is equal to this percentage of the term completed. If the withdrawal occurs after more than 60% of the term is completed, the percentage earned is considered to be 100%.

If more Title IV aid was disbursed than was earned by the student, WVU Tech is required to return the less of (1) the unearned aid percentage of institutional charges or (2) the unearned aid percentage applied to the total Title IV aid received. The student must return unearned aid for which the student is responsible after subtracting the amount the school will return. Funds are returned in the following priority:

1. Unsubsidized Federal Direct Loan
2. Subsidized Federal Direct Loan

3. Federal Perkins Loan
4. Federal Graduate PLUS Loan
5. Federal PLUS Loan aid
6. Federal Pell Grant
7. Federal SMART Grant
8. Federal SEOG
9. Other Title IV assistance
10. Other federal, state, private, or institutional

If the student earned less Title IV aid than was disbursed, the student is entitled to a post-withdrawal disbursement within 30 days of withdrawal.

The return of financial aid may result in unpaid charges to WVU Tech for tuition/fees and room/board. WVU Tech will bill the student for any balance due. Students who owe a repayment to any federal financial aid program are no longer eligible for financial aid at any post-secondary institution. Eligibility may be regained after repayment is satisfied. If less Title IV aid was disbursed than was earned by the student, the student is entitled to a post-withdrawal disbursement within thirty days of withdrawal. Check with the Financial Aid Office for requirements.

Refunds of Residence Hall Fees

A resident who takes possession of an assigned residence hall space, and officially checks out in accordance with prescribed procedures will receive a refund that is prorated based on the number of days remaining in the term. Termination of the residence hall contract for disciplinary reasons may result in forfeiture of all prepaid fees.

Refunds of Board Fees

Board fees are refunded on a daily prorated basis.

No refunds are provided for housing and board due to closures of the institution as long as the residence halls are open and food service is being provided.

In this section:

The Financial Aid Office awards grants, scholarships, loans, and employment to more than half of the students attending WVU Institute of Technology, Beckley Campus. Students seeking financial aid for a full academic year are encouraged to begin the application process on or after October 1, for the following academic year. Please note that the student applicant and/or the parent or guardian may be required to submit copies of federal tax information to verify the accuracy of personal data. Admitted students will receive financial aid award information upon completion of review.

To apply for financial aid, first apply for a Federal Student Aid (FSA) ID, for each student and a parent (if student is determined, a dependent of their parent) at https://studentaid.ed.gov/sa/fafsa/filling-out/fsaid. You will use the FSA ID log in and to access and sign your online Free Application for Federal Student Aid (FAFSA), review your processed information, correct FAFSA data, and conduct other important business directly with the US Department of Education. Save the FSA ID'; you will need it for future transactions. Completion of the FAFSA form determines eligibility for the:

- Federal College Work Study (CWS)
- Federal Pell Grant
- Federal Perkins Loan
- Federal Stafford Loans
- Federal Supplemental Educational Opportunity Grant (SEOG)
- Higher Education Adult Part-Time Award
- West Virginia Promise Scholarship
- West Virginia Higher Education Grant
- Financial Aid Programs From Other States

The Free Application for Federal Student Aid (FAFSA) information is generally available by early April of each year. You may also find information at the Federal Student Aid website (https://studentaid.ed.gov/sa/fafsa). The completed the applications must be postmarked by March 1 of the calendar year of enrollment (priority deadline date). It is necessary to submit the FAFSA form on an annual basis, for consideration of federal and state financial aid programs.

The Financial Aid Office helps students and members of their families locate, apply for, process, and maintain eligibility for various types of financial aid. Members of the staff provide financial aid education through individual counseling, campus promotional events, and group presentations; they investigate and resolve individual financial aid questions; and they strive to provide timely and accurate financial aid processing that is in full compliance with all federal, state and University regulations.

Financial Aid is located in the Benedum Building, Suite 100, Phone: (304) 929-1440.

WVU Tech will make every effort to facilitate financial assistance to eligible students. However, if the student and/or the parent or guardian fails to provide the necessary information in a timely manner, the University is not obliged to defer payment of fees.

Types of Federal Financial Aid and Application Due Dates

- Federal College Work Study – https://www2.ed.gov/programs/fws/index.html - Recipients may work a maximum of 20 hours per week during full-time enrollment periods or a maximum of 40 hours per week during non-enrollment periods, such as breaks, holidays, and summers, providing there is evidence of intent to enroll the following semester. The rate of pay per hour is determined by the job description, with the lowest rate being equal to federal minimum wage. The priority deadline for FAFSA submission to the Processing Center is March 1.
- Federal Direct Plus Loan - https://studentaid.ed.gov/sa/types/loans/plus - The parent or guardian must authorize a credit check and, if approved, submit the Master Promissory Note (MPN). If the loan request is denied, the student may apply for an additional unsubsidized loan.
- Federal Direct Subsidized and Unsubsidized Loan - The Master Promissory Note (MPN) and entrance loan counseling must be completed by all first-time loan borrowers.
- Federal Pell Grant - Deadline to submit application form is the last day of enrollment in a given academic term.
- Federal Perkins Loan - A low-interest (5%) loan, the amount for which is determined by availability of funds - The Master Promissory Note (MPN) and entrance loan counseling must be completed by all first-time loan borrowers. Deadline for FAFSA submission to the Processing Center is March 1.
- Federal Direct (Subsidized and Unsubsidized) Loan - http://www.aessuccess.org/ - A low interest loan made available through the Department of Education.
- Federal Supplemental Education Opportunity Grant (SEOG) - Deadline for FAFSA submission to the Processing Center is March 1.

Other Types of Financial Aid and Application Due Dates

- Campus Based Aid – Decisions about campus-based aid are based upon consideration of both the FAFSA and the electronically submitted needs analysis materials. Deadline for application is March 1.
- Institutional Scholarships – Scholarship usually have unique and individual requirements and deadlines, and amounts awarded vary by program.
- West Virginia Promise Scholarship – https://secure.cfwv.com/Financial_Aid_Planning/Scholarships/Scholarships_and_Grants/West_Virginia_PROMISE.aspx - Deadline for application by rising freshman students is March 1.
- State Work-Study Program – Similar to the Federal Work-Study Program except it is not based on need and 100% of wages are paid by the employer.
- West Virginia Higher Education Grant – The FAFSA form must be postmarked by March 1 of the calendar year of enrollment.

To the maximum extent practicable, WVU Tech provides employment that reinforces the educational programs or vocational goals of the college work-study students. Once notified of available positions by the various departments of the University, the Financial Aid Office staff has the sole responsibility for job placement.

Eligibility for Federal Financial Aid

To be eligible for, and keep, federal aid the student must:

- Enroll at least half time in an eligible degree or certificate program
- Be a U.S. citizen or an eligible non-citizen with a valid social security number
- Demonstrate financial need (except for certain loans)
- Make satisfactory academic progress as determined by the Satisfactory Academic Progress Policy for Financial Aid: http://financialaid.wvu.edu/home/maintain/academic-progress/undergraduate
- Not fall into default on a Federal Perkins Loan, Federal Stafford Loan, or Federal PLUS loan (parents of students), at any school
- Not owe a refund on a Federal Pell Grant or a Federal Supplemental Educational Opportunity Grant or any other federal program at this or any other school
- Be registered with Selective Service, if male and between ages of 18 and 25

Satisfactory academic progress (SAP) policy establishes successful standards of coursework completion, to maintain eligibility for student financial aid. Failure to meet these standards will cause the aid recipient to have financial aid suspended.

1. Undergraduate students must maintain a minimum cumulative 2.0 GPA.
2. Undergraduate students must successfully complete a minimum average of 67% of all attempted credit hours.
3. Undergraduate students must obtain a degree or certificate program within 150% of the published timeframe for degree completion for their program of study.

At the end of the spring semester, a review of all financial aid recipients occurs to measure progress. All credits attempted are reviewed, including credits attempted without financial aid, and transfer credits, on the academic record. Students who initially fail to meet the minimum standards of progress will have their financial aid suspended.

Students who fail to meet the terms of SAP will have their financial aid suspended. Students who have been academically suspended from the instituted and readmitted, are not eligible for financial aid unless meeting the SAP policy.

Students with mitigating circumstances may appeal for an extension period. Students may submit a Satisfactory Academic Progress Appeal Form for review. Documentation of special circumstances, successful resolution of problem(s) causing academic distress and a program of study plan approved by the academic advisor is submitted. Students will be notified of a decision in writing.

Students suspended from financial aid eligibility who do not have mitigating circumstances may be able to request reinstatement for financial aid. They must have made positive progress towards their degree since suspension from eligibility. Students may submit a Satisfactory Academic Progress Appeal Form for review. Students will be notified of a decision in writing.

If a student is enrolled in dual degree programs, seeking a second undergraduate degree or changing majors, an extension of the maximum timeframe provision of this policy may be requested. Requests will be evaluated on a case-by-case basis. The credits earned under all majors will be included in the calculation of attempted, earned, and maximum timeframe credits, as well as the GPA calculation. If a student continues to take classes towards a second major after completing all required coursework for a first degree that has not yet been awarded, aid may continue as long as SAP standards are met and the maximum timeframe is not exceeded.

All credits attempted and earned at any West Virginia University campus (WVU Tech, Morgantown or Potomac State) will be included when calculating the maximum time frame, GPA, and credit completion.

If a student is required to withdraw for military service, credit completion and maximum timeframe requirements will be waived for the semester of the student's official withdrawal.

College credits earned while a student is in secondary education will be included in the cumulative credit completion ratio, GPA, and the maximum timeframe calculation.

Students who want to learn more about federal financial aid should check out the following website https://studentaid.ed.gov. Students with specific questions concerning federal financial aid should call West Virginia University Institute of Technology's Financial Aid Department by phone at 888.554.8324, or by e-mail at Tech-Financial-Aid@mail.wvu.edu (tech-financial-aid@mail.wvu.edu).

Determining Financial Need

The amount and combination of financial aid resources that can be awarded are usually governed by financial need. Need is the difference between the total cost of attending college and Expected Family Contribution (EFC), which is the amount the student and the student's family will contribute toward this. The difference between total cost and the EFC is the projected financial need. Sources of revenue, including income, assets, and benefits (for example, unemployment benefits or Social Security), are all taken into consideration in determining financial need.

Transfer Students

Financial aid does not automatically follow the student who transfers to WVU Tech from another school (including West Virginia University). To continue receiving aid, the student should check with the Office of Financial Aid as soon as possible to find out what aid will be available. It is the transfer student's responsibility to:

- Submit an academic transcript from all previous schools attended.
- Apply a new through the WVU Tech Office of Financial Aid.
- Change the federal school code to WVU Tech - 003825 online at www.fafsa.ed.gov (https://fafsa.ed.gov).
- Notify any state grant programs of intent to transfer

Notice of Financial Aid Award

An award offer is made available after the awards are arranged by the Financial Aid Office. The student who wishes to accept or decline any of the aid offered should do so within 30 days of receiving the award information, by replying online by way of the STAR Information System intranet account.

When pending financial aid is not available by the billing due date, the student should arrange to pay the costs to avoid late fees; any overpayments are refunded to the student. Please note that, to comply with federal regulations, it may be necessary to reduce some financial awards so that financial aid will not exceed the actual cost of education at WVU Tech.

Disbursement

Disbursement of awards happens on a per term basis, unless otherwise stated by scholarship donors or other third parties. These disbursements pay charges for tuition, fees, room, board, and other fees (as applicable). Any overpayments are disbursed to the student by:

- *E-Refund* - Your funds transferred to any US bank of your choice by signing up for *E-Refund.* Sign-up at http://studentaccounts.wvu.edu/refunds.
- Paper Check - If the above option doesn't apply, a paper check will be mailed to the student. The check will be mailed to the mailing/local address on file in the STAR system. *This process can take up to 7-10 business days.*

Student Responsibilities

It is the student's responsibility to:

- Review and consider all information about the school's program before enrolling.
- Complete all application forms accurately and submit them on time to the right place.
- Accurately complete the application for student financial aid. (Errors can result in long delays in receiving financial aid. Intentional misreporting of information on an application for federal financial aid is a violation of law and considered a criminal offense that is subject to penalties under the U. S. Criminal Code.)
- Return all additional documentation, verification, corrections, and new information requested by either the Office of Financial Aid or the agency to which the application was submitted.
- Read, understand, and keep copies of all signed forms and relevant materials.
- Accept responsibility for all signed agreements.
- Notify the lender of any changes in name, address, or school status.
- Perform in a satisfactory manner the work agreed upon in accepting a College Work-Study award.
- Know and comply with the deadlines for application or reapplication for aid.
- Know and comply with the school's refund procedures.
- Know and comply with the satisfactory academic progress policy for financial aid.

Academic Information and Policies

In this section:

Goals of Undergraduate Education at WVU Tech

West Virginia University Institute of Technology is committed to providing a high-quality education to all students without regard to race or color, sex, sexual orientation, veteran status, religion, age, disability, national origin, creed, ancestry, or political affiliation.

Students at WVU Tech can expect to acquire:

- Basic foundation in liberal studies, with humanities, social sciences, natural sciences, and the arts integrated into degree programs, to help facilitate understanding of the world at large and competencies to deal with social, cultural, and technological change.
- Critical thinking and problem-solving skills; the ability to read and listen critically, ask appropriate questions, gather relevant information, and apply critical analysis to reach logical conclusions; the underpinnings of these skills are mathematical literacy and proficiency in oral and written communications.
- Proficiency in their major field of study, so that as graduates they are competitive in the job market or are prepared for graduate or professional schools.
- Knowledge, understanding, and appreciation of diversity (of languages, cultures, ideas, and peoples), desire to treat all persons in a manner consistent with social justice.
- Commitment to and practice of ethical behavior, responsible citizenship, and public service.

Official Program Designations

Degree program: A degree program is an area of study approved as such by the institution and the Board of Governors (BOG) and listed on the official inventory of degree programs (https://www.wvhepc.org/resources/degree%20inventory%20update/progoffpubpriv.html#IDX1). The degree, which is an

award signifying a rank or level of educational attainment and which is conferred on students who have successfully completed a degree program, is represented by the official degree designation (e.g., B.A.—bachelor of arts, B.S.—bachelor of science, etc.)

Major: A major is a field of study within an approved degree program, having its own curriculum. A degree program may have more than one major.

Area of Emphasis: An area of emphasis is a specific subject area within an approved degree program and major. Normally, a minimum of 12 credit hours and no more than 18 credit hours are expected for an area of emphasis within a baccalaureate degree program. Normally, a minimum of 6 and no more than 12 credit hours would be expected for an area of emphasis within a graduate degree program.

Minor: A minor is an area of study outside of the major that encourages students to pursue a secondary field. Students may not earn a minor in the same field as their major. Requirements for a minor are set by the academic unit offering the minor and must include at least 15 hours of coursework, with a minimum of 9 hours at the upper division level (course numbers 300 or above). Minors are only available to students earning a baccalaureate degree.

Certificate program: A certificate program is a coherent, specialized curriculum designed for students in search of a specific body of knowledge for personal/career development or professional continuing education. Normally, a minimum of 12 and no more than 21 credit hours constitute a certificate program at the baccalaureate or graduate level.

In this Section:

Purpose

The General Education Foundations (GEF) provides students with academic and intellectual breadth to appreciate the broad context of their actions, their choices, and their world, beyond their major field(s) of study. WVU aims to help students build the foundational skills and knowledge necessary to reason clearly, communicate effectively, think critically, and contribute to society.

The General Education Foundations (GEF) are designed to ensure that students meet these goals through inquiry-based learning across disciplines. In conjunction with a major field, and in consultation with their advisors, students will design programs of study that satisfy the GEF. The GEF works to fulfill the University's goals of (1) creating well-rounded students with a broad base of skills and knowledge, (2) linking together the courses that students take at WVU, and (3) instilling in students a permanent connection to learning and education, giving them the skills to learn what they need outside a formal educational environment.

The GEF strives to help students be thoughtful participants in a democratic society, and to achieve the intellectual integration and awareness they will need to adapt to changes and meet challenges in their personal, social, and professional lives.

Policies Governing This Curriculum

1. Students will take between 31 and 37 credits, organized into eight foundation areas (F1 through F8).
2. Courses used to satisfy requirements of the GEF may also simultaneously satisfy major or other requirements for an undergraduate degree at WVU. Colleges and schools may elect to restrict the number of credits that can be shared between the GEF requirements and others required for their program(s). All undergraduate students must at a minimum complete 120 credits (or higher as established by their degree program) to earn a baccalaureate degree at WVU.
3. In addition to fulfilling seven foundation areas (F1 through F7) (22-28 credits), students will choose a minimum of three courses (9 credits) to fulfill foundation area F8, the Focus. Working in consultation with their advisors, students will choose one of four options: 1) select 9 credits from the list of approved GEF courses not used to satisfy the seven foundation requirement, from any combination of disciplines; 2) completion of a minor; 3) completion of a double major; 4) completion of a dual degree.

Descriptions of Requirements

GEF courses are grouped according to specific expected outcomes, which are in addition to the AACU LEAP skills that are recognized as institutional objectives

F1. COMPOSITION AND RHETORIC (3 OR 6 CREDITS)

Effective, concise, and clear use of English, in both speech and writing through various media, is essential to success both during the course of study and in a career or future professional life. The English Area ensures that students have understood the fundamentals of communicating in English, and works in tandem with college- or program-based communication requirements. Students will demonstrate effective communication in English, completing ENGL 101 and 102 or ENGL 103.

F2A/B. SCIENCE & TECHNOLOGY (4-6 CREDITS)

A fundamental grasp of the nature of science is essential for responsible, sustainable, and intelligent interaction with the world. Each of us must be able to evaluate scientific developments, technological advancements, and our evolving natural world in order to thrive.

Students will apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions. Students must complete either two lecture courses for a minimum 6 of credits from F2A or one lecture/laboratory combination for a minimum of 4 credits from F2B.

Students electing to fulfill the Foundation Area 2 requirement by completing F2B must successfully complete a science lecture course and its corresponding laboratory. Students who complete only the lecture or laboratory component for one science combination and complete only the lecture or laboratory from a different lecture/laboratory combination will not satisfy the Area 2B requirement. However, the lecture/laboratory component for any courses not used to satisfy another GEF requirement can be used to satisfy the Foundation Area 8 (GE Foundation Focus) requirement.

Requirement fulfilled by completing two lecture courses from F2A or one lecture/lab combination from F2B.

F3. MATHEMATICS & QUANTITATIVE SKILLS (3-4 CREDITS)

Mathematics and quantitative skills are necessary in education, the workplace, and nearly every field of human endeavor. Quantitatively literate citizens must have the capacity to understand numerical aspects of daily life and apply critical reasoning to data.Students will demonstrate effective use of quantitative techniques and practical application of numerical, symbolic, or spatial concepts.

F4. SOCIETY & CONNECTIONS (3 CREDITS)

As global citizens, we must understand human behavior in its many forms and expressions, which may include methods of communication, familial and professional relationships, or our place in social, political, and economic systems. Civic knowledge and engagement are critical to individual, societal, and global survival. Students will demonstrate understanding and analysis of human behavior, societal and political organization, or communication.

F5. HUMAN INQUIRY & THE PAST (3 CREDITS)

Human development reminds us of the continued importance of understanding events in a larger context of past experience, philosophical inquiry, or spiritual questing. A fundamental knowledge of our forebears, their successes, mistakes, obsessions, and weaknesses allow us to progress. A fundamental grasp of the realm of human thought, reason, ethics, or beliefs enables us understand our world and ourselves. Students will interpret historical events or philosophical perspectives to identify patterns, develop analytical reasoning, apply methods of critical inquiry or expand problem-solving skills.

F6. THE ARTS & CREATIVITY (3 CREDITS)

Creativity, as expressed through works of art, is a defining human characteristic. Regardless of the medium, art communicates and connects us to human innovations and achievements of the past, present, and shared future. Artistic expression employs integrative and creative thinking that promotes transformative ideas capable of crossing disciplinary and cultural boundaries.

F7. GLOBAL STUDIES & DIVERSITY (3 CREDITS)

The world is more than our familiar neighborhoods and people who share our individual beliefs and traditions. We can come to appreciate our global society when we consider other ways of life, experiences, means of expression, histories, and modes of being. As we seek to expand our knowledge beyond the confines of our own experiences, we open up our minds and our worlds. Embracing human diversity enriches our understanding, including the understanding of what we have in common. Students will apply methods and principles of critical inquiry to explore global issues and cultural, linguistic, or experiential diversity.

F8. FOCUS (9 CREDITS)

The GEF designates 9 credits (normally 3 three-hour courses) of Focus coursework, to help students capitalize on the range and diversity of courses offered at WVU. In order to maximize connections, incorporate additional competencies, and encourage true breadth of study, students must fulfill the Focus through completion of one of the following academic paths:

- Minor (link to minors available)
- Double major
- Dual degree

9 credits of additional coursework from the list of courses approved for GEF Areas 2-7 Students are expected to work with their advisors to ensure completion of the Focus. Students completing three minors as part of a MDS program must satisfy the Focus by completing 9 additional credits of GEF coursework, or a fourth minor.

Courses at WVU Tech Fulfilling the GEF Objectives

Courses fulfilling the GEF objectives at WVU Tech can be found at http://techregistrar.wvutech.edu/files/d/60faddcb-c78f-4685-9066-68fa7466018b/wvutech-gef-masterlist-20160215.pdf.

Academic Advising

New students will be advised initially in the Student Success Center. As the student transitions into their chosen academic program, an advisor from the major department will be assigned to the student Advisors assist students in understanding major and university requirements; major matriculation processes; course registration planning and processes; prerequisites; the General Education Foundation (GEF); probation and suspension; and academic options. WVU Tech students are required to meet with their academic advisors prior to registering for classes each term.

At the same time, though, students are also expected to become familiar with the *Undergraduate Catalog*, as it relates to their academic goals and standing. Students should be able to articulate the requirements of their major and of WVU Tech, the matriculation process for their major, plan for their scheduling and registration, use the WVU Tech website, and make full use of academic advising.

In this section:

College Level Examination Program (CLEP)

Students with significant learning associated with life experiences may earn up to 35 hours of general education or elective credit for this experience through the College Level Examination Program (CLEP). Although the CLEP program was designed primarily for adults, exceptionally well-qualified high school seniors are eligible to utilize the CLEP program as well. Courses for which credit may be earned through CLEP examinations are listed online at http://admissions.wvu.edu/admissions/equivalency. The inventory of CLEP examinations is dynamic and changes over time. Some CLEP examinations may no longer be offered and may not appear in the above list. Students should check with the WVU Tech Office of the Registrar to determine if / how WVUIT will recognize the learning and credit associated with CLEP examinations that do not appear on the College Level Examination Program (CLEP) Equivalency Table.

Credit by Examination

A current student with sufficient proficiency in material covered by a specific course may apply for credit for this course by examination. A student who desires to obtain credit by examination must petition the chair of the program that provides the course to be allowed permission to attempt an examination for credit. The chair of the concerned department shall determine the general proficiency of the student by preliminary examination. Assuming strong performance by the student, the chair may recommend to the committee on Classification and Grades that the student be given the opportunity to attempt examination for credit. If approved, the student will then sit for a comprehensive departmental examination that is administered by an examining board of one or more faculty, who are appointed by the department in which credit is being sought. Credit will be granted if a minimum grade of “C” is attained. The test and results shall be presented to the Classification and Grades Committee for final review (a fee of $20 per credit hour will be assessed). A student who fails a departmental examination may not apply to retake it. Nor may a student request an examination on the basis of an audit course or one in which a grade less than “C” was earned.

Academic Credit for Military Training

Academic credit may be granted to veterans or National Guard or Reserve members for successful completion of formal service-school training programs on the basis of evaluations made by the Commission on Accreditation of Service Experiences and published in the American Council on Education’s (ACE) “Guide to the Evaluation of Educational Experiences in the Armed Services.” Students who apply for such credit are required to submit official records such as the DD-214, transcript of in - service training, certificates or diplomas, or in-service training certified on DD Form 295 (Application for Evaluation of Educational Experiences during Military Service). Students may also request a record of their educational experiences (course work and occupational) associated with the Army, Marine Corps, Navy, and Coast Guard by submitting a request through the Joint Services

Transcript Portal. Active duty National Guard and Reserve in listed Air Force personnel may request an official transcript of their education experiences through the Community College of the Air Force (CCAF).

Classification of Students by Class Rank

WVU Tech undergraduates are classified as freshmen, sophomores, juniors, or seniors. These classifications are based upon the number of hours completed. The classifications are as follows:

Classification	Hours
Freshman	1-28 Earned Credit Hours, Inclusive
Sophomore	29-58 Earned Credit Hours, Inclusive
Junior	59-88 Earned Credit Hours, Inclusive
Senior	89 or More Earned Hours

Note: Classification of students will be updated starting Summer 2018.

Credit Hours

Academic advancement is measured by credit hours. Earning one credit hour generally means attending a 50-minute lecture class (one clock hour) each week of the full term. Laboratory credit of one credit hour generally means laboratory work of two to three clock hours per week. Course descriptions in the catalog show the number of credit hours for the course and the number of hours of lecture and/or laboratory per week. Credit hours for web-based courses are determined by comparison of the amount of material presented to that covered in an equivalent face-to-face course. Students are expected to devote additional hours to study outside of the classroom or laboratory for academic success.

Required Credits

WVUe 191 First-Year Seminar, is required of all first-time, full-time freshman students and full-time transfer students enrolling with fewer than 29 credit hours. This course is designed to assist new students in transitioning smoothly to the Tech community. Students who do not pass this course (WVUe 191) must continue to re-enroll until they pass the course. Each degree program specifies its unique combination of required courses and electives. The pattern sheets that appear later in this catalog delineate these individual sets of requirements. All WVU Tech baccalaureate level programs must require at least 120 credit hours of course work.

Credit-Hour Load

The maximum credit-hour load for fall and spring terms is 20 credit hours, and the maximum allowable for summer is 14. Exceptions may be permitted after consultation with the student’s advisor. Registration for loads in excess of these maxima must be accompanied by a properly executed waiver form signed by the student’s advisor, department chair, and dean of the college.

Summer Term

WVU Tech has one summer term, which begins mid-May and ends in early August. Requirements for admission and work performance for the summer term are the same as for fall and spring terms. Courses are offered in a variety of time frames, e.g., one week, three week, six week, eight week, and 12 week. Summer offerings vary from year to year. For complete information concerning course offerings during the summer term, please visit courses.wvu.edu. Most summer course s have an on-line format.

Class Attendance

At WVU Tech, class attendance contributes significantly to academic success. Students who attend classes regularly tend to earn higher grades and have a higher passing rate. Excessive absences may jeopardize students' grades or even their ability to continue in their courses. There is a strong correlation between regular class attendance and academic success. Faculty are strongly encouraged to require attendance in all 100-level classes.

Instructors must set attendance policies that are appropriate for the goals and instructional strategies of their courses. Instructors may include attendance records in determining the final course grade. All attendance policies that affect students' grades must be announced in writing within the first week of class. Moreover, instructors are responsible for keeping accurate enrollment records, and for keeping accurate attendance records when attendance is used in grading. Attendance policies thought to violate the statement on student attendance should first be discussed with the instructor, then with the department chair, and finally the college dean, if necessary.

Students who are absent from class for any reason are responsible for all missed work and for contacting their instructors promptly, unless the instructors' policies require otherwise. However, instructors cannot require documentation of student illness from any medical provider as part of an attendance policy, since medical conditions are confidential and frequently not verifiable.

Institutional excuses for college-sponsored activities are granted by the academic deans and Provost at WVU Tech, and are to be honored by each instructor. These excuses are defined f or a particular period of time. Missed course work is to be made up in a timely manner, and the student is expected to be proactive in communicating with the instructor when missing class with an excused absence. Students absent from regularly scheduled

examinations because of authorized University activities will have the opportunity to take them at an alternate time. Such make-up examinations should be of comparable difficulty to the original examination.

Instructors are urged not to schedule examinations or field trips on "Days of Special Concern" that are identified in the university and academic calendars.

Final Examinations

The last week of each regular term in the academic year is designated as finals week. Final examinations for the summer term are given on the last day of classes. Students who take one section of a multi-section course may be required to take a departmental final examination, given during the regular final examination period. All final examinations, unless otherwise approved by the Provost, must be given according to the official final examination schedule provided by the Academic Affairs Office. The only tests permitted during the week of classes preceding finals are final examinations for evening classes (classes meeting at 6 p.m. or later or classes meeting at 4 p.m. or later if the class meets once a week), practical laboratory tests, make-up examinations, and regularly scheduled short quizzes. If a student has more than three final examinations in one day, the student may make arrangements to take one of the examinations on a different day. Finals are held in classrooms regularly scheduled unless students are otherwise notified.

Last Week of Classes

Practical laboratory tests, make-up examinations, and regularly scheduled short quizzes are the only tests permitted for day classes during the week of classes preceding finals week unless the faculty member petitions the Provost and the petition is approved by the beginning of the second week of the semester in which the final exam is to be given.

Auditors

An auditor registers for a course and pays full fees for it; however, an auditor cannot receive academic credit for the course. The student who wishes credit for an audited course must let one semester pass before enrolling in it for credit. The student may change his or her status from audit to grade or grade to audit only during the registration period. Attendance requirements for auditors are determined by the instructor of the course. The instructor may direct the Registrar to remove an auditor from a class list or grade report if attendance requirements are not met.

Visiting Students

Full-time WVU Tech students and those employed by the University (administration, faculty, or other regular University employees) may attend classes as visitors. Visiting students must have permission in writing from their advisor and/or supervisor, and all visiting students must have permission from the instructor of the course. A visitor will not receive credit and may not apply for credit by examination in a visited class.

Transcripts

Students desiring official copies of their college records should make requests to the Office of the Registrar at least one week before the transcripts are needed. Two weeks may be necessary at the beginning or end of a term. The first transcript is furnished without charge, but a fee must accompany each additional request. All financial obligations to the college must be satisfied before a transcript will be issued. Unofficial transcripts may be obtained by printing them from the STAR transcript page.

Change of Schedule and Course Withdrawals

Changes in a student’s schedule will be processed when a Change in Schedule form has been properly signed and returned to the Registrar. No additions to a student’s schedule may be made after the late enrollment period without the approval of an academic dean. All withdrawals after the first week of classes must be approved by an advisor.

A student must have satisfactorily completed the English sequence by the end of three semesters. A student, who has not passed ENGL 102, must take the proper English sequence consecutively and cannot withdraw from the course.

Students enrolled in English courses ENGL 090 or ENGL 091 may not withdraw from these courses. Credit for these courses may not be counted toward a degree program.

A student has two weeks after the day designated as midterm to withdraw from a course with a “W” grade. This date is given in the academic calendar. Note: Different dates will be in effect for part-of-term courses, e.g. eight-week or five-week courses. In an emergency or when extenuating circumstances justify an exception, an academic officer may recommend in writing that the student receive a grade of “W”.

Students may withdraw from the institution as late as the last day of classes. The official date will be shown in the academic calendar. A complete withdrawal is initiated by completing a Withdrawal Form, which is available from the Registration and Records Office.

During the summer, the deadline for withdrawal with a “W” is approximately three weeks in a six-week session and approximately seven weeks in a twelve-week session. These dates are given in the academic calendar.

Changing Majors

A student indicates a major at the time of application for admission and remains in that major until graduation or until receiving approval to change to another major. Such approval is granted when the student completes an Academic Status Update form; available in the Registration and Records Office. Changes in major must be processed by the end of the first week of each term in order to be in effect for the current term.

Some majors–pre-professional, pre-engineering, general engineering–are not associated with degrees. It will be necessary for any student admitted under one of these majors to change to a degree program once they have earned 30 credit hours of college-level credit.

In this section:

Courses

Most courses taught at WVU Tech extend over one full term, although there are some courses that are exception s to this norm (e.g., four-week or eight-week courses). Courses are considered successfully completed and credit for successful completion is awarded only when the student attends a class over its entire scheduled time frame and submits the necessary work to meet all requirements. Any exceptions to this practice must be approved by the Classification and Grades Committee. Courses taught during the summer term or as part-of-term courses have the same credit value as their counterpart courses that are taught during fall and spring terms. Web courses also earn the same credit as their counterpart courses that are offered in a face-to-face mode.

Evaluation of Student Progress

WVU Tech discourages evaluation by final examination only. Student progress should be measured and evaluated by a variety of methods that are consistent with the objectives of the course. The student is responsible for all materials presented or assigned in scheduled instructional sections. Students who do not complete all assigned work may earn an incomplete “I” or a failing grade “F”. If the grade is incomplete “I”, the student must submit a written contract to the instructor that is built upon a time line to finish the course within the next full term. A student has one regular term (excludes summer) in which to complete a course in which an “I” grad e was awarded. Otherwise, the “I” grade will automatically be converted into an “F” grade.

Grading System

Grade	Description
A	Excellent (given only to students of superior ability and attainment)
B	Good (given only to students who are well above average, but not in the highest group)
C	Fair (average for undergraduate students)
D	Poor but passing (cannot be counted for graduate credit)
F	Failure
I	Incomplete
W	Withdrawal from a course before the date specified in the University calendar
P	Pass (see Pass/Fail Grading below)
X	Auditor, no grade and no credit
CR	Credit but no grade
S	Satisfactory
U	Unsatisfactory (equivalent to F)
IF	Incomplete grade not removed by next regular term (computed as an F)
UF	Unforgivable F (not eligible for D/F repeat policy)

Grade Points

Each letter grade has a numeric value. Grade points are based on this number value and the credit-hour value of the course.

- A- 4
- B- 3
- C- 2
- D- 1
- F- 0
- I- 0
- U- 0

The grade point average is computed on all work for which a student registers, with the following exceptions:

- Courses with a grade of “W”, “P”, “S”, and “X” carry no grade value. The grade of incomplete “I” initially carries no grade value.
- The grade of “I” is given when the instructor of the course believes that the work is unavoidably incomplete or that an additional examination is justified. There must be a written contract between the student and instructor, including a timeline for completion of the work. To remove the grade of “I”, a student does not register for the course again; instead, he or she arranges to submit incomplete or supplemental work to the original instructor of the course.

When a student receives the grade of “I” and the incomplete grade is later removed, the grade point average is calculated on the basis of the new grade. If the “I” grade is not removed within the next full semester enrolled, the grade is treated as an “F” (failure). The Classification and Grades Committee may allow a student to postpone removal of the “I” grade if the student can justify a delay.

Pass/Fail Grading

Pass/fail grading encourages students to take elective courses not related to their degree concentrations. Pass/fail grading also facilitates grading in competency-based courses that may be an integral part of an academic program.

Student Option - Any full-time student who has completed 15 hours or more and who has maintained a 2.0 grade point average may take a maximum of four hours each semester or summer term on a pass/fail basis. Any course taken on a pass/fail basis must be a free elective. Students are limited to a total of 18 hours of pass/fail credit in their collegiate career. Unless otherwise indicated, courses in the major, courses in other subjects that are required by the major, and courses taken to satisfy university, college, or departmental requirements are excluded from pass/fail. For example, courses elected to satisfy the General Education Foundation (GEF) or foreign language requirements may not be taken for pass/fail grading.

A course taken on a pass/fail basis is graded as a graded course. The grade of “P” does not affect grade point average. However, any “F” grade affects a student’s grade point average regardless of whether it is a regular grade or a pass/fail grade, with the exception that no grades for developmental (90-level) courses are counted in computing the grade point average.

A student chooses the option of pass/fail grading for a course during the registration period. Once the registration period has ended, he or she may not change the grade status in the course.

College or School Option - A department or unit may designate any performance- or competency-based course as exclusively pass/fail. To institute this, the college or school must have the approval of the Faculty Assembly. Courses offered only as pass/fail are not included in the maximum of 18 hours that may be freely elected as pass/fail under the student option.

Grade Point Average (GPA) Calculations

All academic programs have baseline standards of scholastic quality that must be met or exceeded. Grade Point Average (GPA) is computed on grades earned in courses taken at WVU Tech and transfer institutions. GPA is based on all work for which a student received a letter grade other than “W”, “WU”, “P”, “S”, and “X”. A grad e received in a developmental course is not calculated in the GPA.

To calculate grade point average:

The following example shows how to do it. Assume 16 credit hours completed earned the following grades:

- English 101 - B
- Mathematics 126 - A
- Geology 101 - C
- Political Science 101 - B
- Spanish 101 - D
- Psychology 201 - P

1. Multiply the number of credit hours per course by the numeric value of its letter grade to obtain the number of grade points earned for each course.

- English 101, 3, B, 3, 3 x 3 = 9
- Geology 101, 3, C, 2, 3 x 2 = 6
- Spanish 101, 3, D, 1, 3 x 1 = 3
- Mathematics 126, 3, A, 4, 3 x 4 =12
- Political Science 101, 3, B, 3, 3 x 3 = 9
- Psychology 491, 1, P, 0, 1 x 0 = 0

2. Add all of the grade points earned for all of the courses completed.

- Add the total grade points earned and divide by the total credit hours *with a grade value.* Remember that P grades have no grade value, so in this case, the grade points earned total 39 (9+6+3+12+9) and there are 15 credit hours (3+3+3+3+3) for the GPA calculation.

3. Divide the total grade points earned by the total number of credit hours for all courses whose grades carry a numeric grade value.

- The GPA calculation for this student would be: 39/15=2.6.

Note that a similar process may be used to calculate the GPA for all credits (including those transferred from other institutions), for credits earned at the institution, or for credits earned in the major.

D/F Repeat Policy

WVU Tech has a D/F repeat policy for undergraduate students who have not received the first baccalaureate degree. If a student earns a “D” or “F” in a course at WVU Tech or any school in the WV State System and the course is taken no later than the semester or summer term in which the student completes the sixtieth (60) hour (includes any class in which the student earns a grade as well as all transfer classes), the student may “D/F repeat” that course. The course can be repeated only at WVU Tech or another campus of West Virginia University. Students have only one opportunity to improve their original grades under the D/F repeat policy. The new grade becomes the grade that counts toward the student’s cumulative GPA and credit hours for graduation, even if the repeated course grade is lower than the original grade in the course. The D/F repeat policy will be enacted any time an eligible course is repeated.

When a course is D/F repeated, the following procedure occurs:

1. The original grade is disregarded for the purpose of determining the overall GPA, it is marked as excluded (E) in the semester that the student originally took the course.
2. The original grade is not deleted from the student’s permanent record.
3. The second grade is entered on the student’s transcript and marked as included (I) in the semester that the course was repeated.
4. Grades of Unforgivable “F” (UF) are not eligible for D/F Repeat. Such a failure is indicated on the student’s permanent record by a “UF” and is calculated in the GPA.

Other Repeating Courses

Courses repeated, but not eligible for the provisions of the D/F repeat policy, follow this procedure:

1. The original grade is included in determining the overall GPA. It is excluded from earned or degree hours and is marked with an (A).
2. The original grade is not deleted from the student’s permanent record.
3. The second grade is entered on the student’s transcript and marked as included (I) in the semester that the course was repeated.
4. Courses repeated more than once (including D/F repeats) are handled the same way with the final attempt carrying earned or degree hours. All attempts are used for determining GPA.

Grade Periods

Mid-semester and final grades are submitted through the STAR grade entry system each semester. Instructors are also encouraged to post early alert grades near the beginning of the semester. The mid-term grades are progress reports only. Students have access to mid-term and final grades through the MIX/STAR system. Grades are not mailed. A student having an error in a grade received or a grade omitted should contact the instructor immediately. An instructor who makes an error in reporting a grade may request a grade change by completing a form provided by the Office of the Registrar.

Grade Appeals

If a student wishes to dispute an hourly examination grade or any grade of importance, the student must see the faculty member involved by the next class meeting after receipt of the grade. If the dispute is over a final examination grade or a final grade, the student must see the faculty member within two weeks after the next term begins.

If not satisfied with the faculty member's decision, the student is directed to make an appeal to the appropriate department/division chair within one week.

If still dissatisfied, the student is directed to make an appeal to the appropriate academic dean, stating the grievance in writing, within two weeks after the meeting with the department/division chair. The written appeal by the student to the academic dean must include a statement of the facts and evidence to be presented by the student in support of the charges made with sufficient clarity to reasonably disclose the claim for a grade change.

Within two weeks after receiving the grievances in writing, the academic dean will bring together the student and the faculty member involved, and the faculty member's department chair/division director for a hearing of appeal. A student who desires may choose a faculty member or another student as the student's representative at the hearing.

If not satisfied with the results of the hearing, the student may, within one week, appeal the case in writing to the chair of the Academic Appeals Committee.

The Academic Appeals Committee shall consist of five faculty members and two student members determined in accordance with the respective constitutions of the Faculty Assembly and the Student Government Association. The Committee will elect its own chair.

Once a written appeal is made to the Committee by a student, the Committee will appoint a faculty member from the same area of study, or from an associated field in which the dispute is involved. The faculty member chosen by the Committee from the area of dispute will function in the same mode as any other member of the Committee for purposes of hearing the particular appeal case and is neither an advocate for the student or the faculty member involved in the appeal. The purpose for the selection is to insure that someone with expertise in the subject area of dispute will be a member of the Committee.

A member of the Academic Appeals Committee involved in such a dispute will be disqualified and the Committee will appoint a replacement.

Members of the Committee have the authority to determine whether or not an academic evaluation was "prejudicial, capricious, arbitrary, or discriminatory" and to recommend a change in grade. However, only the faculty members of the Committee have the authority to determine what the new grade shall be. The Committee will direct the Registrar to make the appropriate amendment(s) to the academic record of the student.

Summer Grade Appeal Policy

Any student whose May graduation was delayed by a grade of "D" or "F" in a required course may request a special summer procedure be instituted for grade appeals. If the faculty member is not on campus, the student may start the appeal process by notifying the department chair or dean within three (3) weeks of the posting date of final grades. For summer grade appeals, the Campus Provost, or his/her designee is empowered to appoint summer replacements for faculty representatives on the committee who are not available. The Dean of Students will appoint student replacements as needed. Other than exceptions noted above, all other portions of the regular Grade Appeals Policy are in effect.

In this Section:

Deadlines

Until the Friday of the tenth week of class (or Friday of the fourth week in a six-week summer course, or Friday of the second week of a three-week summer course), students may withdraw from individual courses. Deadlines are listed each semester on the academic calendar provided on the Current Students web page: http://students.wvutech.edu/. If a student follows all established University procedures and withdraws by the published deadline, he or she will receive a "W" on the transcript. Grade point averages are not affected in any way by this mark; however, the ratio of courses attempted versus courses completed may affect financial aid eligibility.

Procedures for Withdrawing from Individual Courses

Before withdrawing from individual classes, students should consult an advisor to determine if:

- The course load would be reduced below the minimal number of hours required to qualify for financial aid, housing, varsity athletic competition, or international full-time student status.
- The courses to be dropped are required to fulfill academic probationary conditions.
- The courses from which the student wants to withdraw might be co-requisite with other courses the student is taking, or prerequisite to other courses required for the next term.

Withdrawal from All Classes for the Term

A student may completely withdraw from the institution any time before the last day designated for complete withdrawal from the university.

- Students who decide to leave WVU Tech during a term should withdraw from all classes and must do so in accordance with established University policy. Students are responsible for all financial obligations and for following established procedures. This includes the submission of appropriate information and signature of forms in person at the Office of the Registrar.
- Students who are un able to withdraw in person because of illness, accident, or other valid reasons must send notification of their request to withdraw along with all appropriate required information to the Office of the Registrar. The request to withdraw must be verified in writing along with a signature.
- If a student is an international student attending WVU Tech on a visa, the student must report to the Office of the Registrar.
- With the help of their academic advisors, students are responsible for determin ing how withdrawal from the institution may affect their future status, including such aspects as financial aid suspension for failure to make progress toward a degree, or violation of established eligibility for scholarships, fellowships, or financial aid.
- Students called to active military duty during any given semester have specific options regarding the credit hours.

Financial Aid Refund and Repayment Policy

Federal regulations require that WVU Institute of Technology recalculate eligibility for financial assistance for students who completely withdraw, drop out, or are dismissed before completing the enrollment period. Students who receive all unsatisfactory grades (defined as at least one “F” and no passing grades) at the end of the grading period will be considered as unofficially withdrawn at the semester mid - point unless documentation is available that demonstrates continued class participation. Application of this policy may result in the necessity for a student to return financial aid funds to various Title IV federal aid programs including Federal Pell Grant, Federal SEOG, Federal Perkins Loan, and William D. Ford Federal Direct Student and PLUS loans.

A student earns Title IV federal aid based upon the length of time the student remains enrolled during the enrollment period. Students who withdraw on or before completing more than 60 percent of the semester may be required to return a portion of federal financial assistance. The determination of 60 percent of the term is computed by dividing the total number of calendar days in the term into the number of calendar days completed as of the date of student withdrawal. Scheduled breaks of five consecutive days or more are excluded. The percentage of Title IV assistance which the student has earned is equal to this percentage of the term completed. If the withdrawal occurs after more than 60 percent of the term is completed, the percentage earned is considered to be 100 percent.

If more Title IV aid was disbursed than was earned by the student, WVU Tech is required to return the lesser of (1) the unearned aid percentage of institutional charges or (2) the unearned aid percentage applied to the total Title IV aid received. The student must return unearned aid for which s/he is responsible after subtracting the amount the school will return. Funds are returned in the following priority:

1. Unsubsidized Federal Direct Loan
2. Subsidized Federal Direct Loan
3. Federal Perkins Loan
4. Federal Graduate PLUS Loan
5. Federal PLUS Loan aid
6. Federal Pell Grant
7. Federal SMART Grant
8. Federal SEOG
9. Other Title IV assistance
10. Other federal, state, private, or institutional

If the student earned less Title IV aid than was disbursed, the student is entitled to a post-withdrawal disbursement within 30 days of withdrawal.

The return of financial aid may result in unpaid charges to WVU Tech for tuition/fees and room/board. WVU Tech will bill the student for any balance due. Students who owe a repayment to any federal financial aid program are no longer eligible for financial aid at any post-secondary institution. Eligibility may be regained after repayment is satisfied.

Dean’s List

To recognize academic excellence by students enrolled for 12 semester hours or more, the Dean’s List is published at the end of each regular semester. This list contains names of all full-time students whose grade average is 3.5 or higher.

Each student whose grade average in a particular semester is 3.5 or higher receives a certificate from the appropriate dean. Certificates distinctively marked “with highest honors” are awarded to students with a 4.0 average in a particular semester.

The calculation of a student’s end-of-term grade point average can be affected by their performance in a developmental course. Developmental courses are considered to be remedial and are identified by course numbers less than 100. If a student passes a developmental course, a grade of “P” will be

recorded. There are no quality points associated with a passing grade for a developmental course, thus it does not impact the student's term GPA. If a failing grade is earned in a developmental course, the failing grade will be included in the calculation of the student's term GPA. A failing grade earned in a developmental course prevents a student from being considered for the Dean's List.

NOTE: The 3.5 GPA requirement for Dean's List is applicable to all students at the institution in the 2017-2018 academic year, regardless of the year of the catalog by which they are governed.

In this Section:

Requirements for Graduation

A student becomes eligible to graduate when the student completes the requirements of the University and major degree program according to the catalog in effect at the time the student first entered WVU Tech. With the consent of the student's advisor and department chair, a student may choose to meet the conditions published in a later catalog. However, degree programs reserve the right to change requirements for graduation. If such changes are made, they may, at the discretion of the program, be applied to students already enrolled, provided the new requirements do not impose extension of time for completion of a degree.

As a general rule, a student has seven years to complete degree requirements in a baccalaureate program. The student may become subject to additional requirements if this period is exceeded. If the student interrupts their program for a period greater than one academic year, then the student will be subject to the requirements of the catalog that is in effect when the student returns. The student may petition the Classification and Grades Committee to continue under their original catalog in that event. The student has the option to follow a program as outlined in any catalog issued after their initial enrollment or readmission, but the student must satisfy all requirements of the program as outlined in the selected catalog. Combining and/or selecting program requirements from several catalogs is not permitted.

Degree requirements vary from program to program. The minimum total of semester hours for a B.A. or a B.S. degree is 120. The student is responsible for completing all course requirements including any required core requirements listed in the pattern sheet and should schedule a graduation check with the Registrar during **both** of the last **two** semesters preceding graduation. If a substitution or waiver is approved by the advisor and dean, a signed waiver form must be on file in the Office of the Registrar. Candidates for graduation taking courses under the transient student status must see that a transcript is received in the Office of the Registrar no later than ten (10) calendar days after the Commencement date.

Graduation requirements for **baccalaureate degrees** from WVU Tech include the following:

1. Thirty of the last 36 hours taken in residence at WVU Tech. (exception will be made for students admitted to medical, dental, and law schools prior to meeting degree requirements provided they have completed a minimum of 92 undergraduate hours at Tech.
2. A minimum of 40 semester hours in upper-division courses.
3. Minimum 2.0 average in all courses attempted.
4. Minimum 2.0 average in all courses attempted at WVU Tech
5. Minimum 2.0 average in all courses attempted at WVU Tech, in major and minor, as indicated below:

    a.) Engineering professional courses-all biology (for Chemical Engineering), chemistry, engineering, math, and physics

    b.) Engineering Technology/Industrial Technology professional courses-all engineering technology, industrial technology, restricted technical electives, and required math and science

    c.) Business and Accounting professional courses-all business, accounting, finance and economics. All Business Management and Accounting majors must sit for the Business Program Assessment Examination

    d.) Biology professional courses-all science, math (including statistics), nursing, and psychology

    e.) All other Baccalaureate Majors and Minors–all courses in major area and all courses within any elected minor area

Students admitted to professional schools may apply for graduation after successful completion of their first year providing that all other degree requirements have been met except for their major. A minimum of 120 semester hours, including professional school, is required.

Application for Graduation

A formal application for graduation must be filed in the Office of the Registrar by the date listed in the academic calendar. A degree will not be awarded until an application is filed. The application should specify all degrees, minors, and areas of emphasis that the applicant expects to be awarded.

Graduation with Honors

WVU Tech recognizes distinguished academic achievement by awarding degrees cum laude, magna cum laude, and summa cum laude. This distinction can be awarded on initial or second baccalaureates.

All candidates for a baccalaureate with a Total Institutional GPA and an Overall GPA of 3.8 or higher graduate summa cum laude. Those with a grade point average of less than 3.8, but equal to or above 3.6, graduate magna cum laude. Those with a GPA of less than 3.6, but equal to or above 3.4, graduate cum laude.

The grade point average for honors consideration for a baccalaureate is based on baccalaureate-level college work attempted through the final semester. This calculation includes baccalaureate-level college work attempted at institutions accredited by regional accreditors in the United States. Credit hours earned with a grade of P or S are not considered in the determination. Grades of F, however, are computed as hours attempted. The grade point average through the penultimate semester will be used for notations in the commencement programs. Students must meet residency requirements within the WVU system to be considered for graduation with honors.

The GPA for honors consideration for entry-level professional degrees is based on baccalaureate-level and professional-level work attempted through the last semester. This calculation includes baccalaureate-level and professional-level college work attempted at all regionally accredited higher education institutions attended. Credit hours earned with a grade of P or S are not considered in the determination.

Students entering and completing a second baccalaureate program following completion of the initial degree are eligible to receive the honors designation. Grade point averages for graduation with honors on second baccalaureates shall be computed on all baccalaureate - level work, excluding credit earned with a P or S. This includes work completed for the first degree as well.

Dual Degrees/Double Majors

The dual degree is the concurrent awarding of two distinct baccalaureate degrees (i.e. B.A., B.S., B.S.E., etc.). Students pursuing two majors in different degree programs must be admitted into each degree program and fulfill all requirements for each degree. Students should pay particular attention to GEF requirements for each degree. Simultaneous completion of dual baccalaureate degrees requires students to complete a minimum of thirty hours beyond their primary degree. For a degree program that requires a minimum of 120 credit hours, students must complete a minimum of 150 credit hours to earn both degrees.

The double major is the awarding of one degree with two majors (e.g. a student who completes majors in English and history earns one B.A. degree). The completion of double or multiple majors must lead to the same degree and can only be achieved simultaneously. Students must be accepted into each major and fulfill all requirements of each major in addition to satisfying all institutional requirements. This may be completed within the minimum credit hour requirement for the degree or may require more credits than the degree minimum. Students who complete multiple majors within one degree will be awarded one degree, and the transcript will list the degree and each major.

Second Degrees

Some students decide to continue their undergraduate studies after receiving their first bachelor’s degree. Students who attempt to earn dual baccalaureate degrees from WVU Tech but do not fully complete requirements for both degrees simultaneously will become second degree candidates. Students who have previously earned a bachelor’s degree, whether from WVU or another institution, must complete a minimum of thirty hours beyond the first degree. Second degree candidates must meet all requirements for their degree program, major, college, or school and the University, including residence requirements. GEF requirements, however, are generally considered satisfied by completion of the first undergraduate degree. In the event that courses taken for the first bachelor’s degree are required courses for the second degree program, the college or school granting the second degree may approve course substitutions. In no circumstance may the coursework in the second degree program be fewer than thirty credit hours after the conferral of the first degree.

Students must have an assigned academic advisor in each department from which the student will earn a degree prior to registering for the last full term before graduation.

Students who receive a Regents BA degree may qualify for a second baccalaureate after one academic year.

Location for Study and Graduation

WVU Tech will continue to offer a full spectrum of programs and courses in Montgomery in Fall 2017 and Spring 2018. Students with few credits needed to meet degree requirements will likely be able to complete degrees in Montgomery by May 2018. However, this depends on the number of credits that are complete d successfully towards that goal in each semester and whether classes are scheduled so that prerequisites can be satisfied. Students with a higher count of credits to complete their degree can study in Montgomery through Spring 2017, and then complete their degree requirements on the

Beckley campus, starting in Fall 2017. WVU Tech will offer all of the courses that are needed to complete a degree on the Beckley campus, beginning in Fall 2017.

If a student plans to study towards a second WVU Tech degree or major, or add a minor, it will still be possible to pursue that plan on the Beckley campus from Fall 2017 onwards.

In this Section:

General Description

The Cooperative Education Program (Co-Op) alternates terms of on-campus study with terms of full-time employment. As an elective program, Co-Op presents students an opportunity to receive both practical and theoretical training in their chosen field of study over a five-year period. There are several advantages for students who elect to participate in this unique program. The Co-Op experience helps students decide early in their college career whether they wish to pursue their chosen academic major and helps students academically by adding new dimensions of understanding to their academic studies. The Co-Op Program also helps students establish contacts in their field, gain 12 to 20 months of practical work experience, and earn the funds to defray college education expenses.

Co-Op Eligibility Requirements

- Be in the process of completing the first year of a declared BA/BS academic curriculum as outlined in the college catalog
- Earn and maintain at least a 2.2 grade point average, although specific employers may require a higher grade point average
- Be enrolled as a full-time student
- Must be available for 3 work terms

A. FRESHMEN Students may apply to the program during their second semester of study. Upon successful completion of their freshmen year, students are eligible to accept a Co-Op assignment.

B. UPPERCLASSMEN (30 credit hours) Students who have completed more than 30 credit hours may apply to the program if grade point average, student status, and availability requirements are met.

C. TRANSFER STUDENTS may apply to the program during their first semester on campus. Upon successful completion of the first on-campus semester, transfer students are eligible to accept a Co-Op assignment.

Co-Op Availability

Co-Op work assignments are available to students enrolled in all BA/BS academic programs, depending upon the needs of potential employers.

Co-Op Employment

Cooperative Education participants, while on work assignments, are considered to be enrolled as full-time students at WVU Tech. Therefore, student status and financial aid, while not disbursed during Co-Op terms, are maintained. Participants will enroll in a Co-Op course for each work term and this enrollment will be documented on the student's academic transcript.

Housing arrangements, while the responsibility of the student, are often coordinated by the employer. Each employer establishes his or her own policy on wage and benefit packages. Participants will receive term performance evaluations. There is no obligation on the part of the student or employer to continue employment upon graduation.

Internship Program

The Internship Program was created to better serve both employers and students when career related employment opportunities develop that do not meet the three-term cooperative education work requirement. To be eligible, students must meet the same academic requirements as stated for the Cooperative Education program.

Departmental Practicums/Internships

A number of programs require supervised Practicum/Internships. The Practicum/ Internship is designed to combine theory and practice in a field integrated with the academic program. Examples include the Department of Social Sciences in the College of Business, Humanities and Social Sciences which require the Practicum Internship and Practicum Seminar for B.S. degree programs in Criminal Justice, Forensic Investigation, Health Services

Administration, and Public Service Administration. The Practicum/ Internship and Practicum Seminar are arranged with cooperating sponsors during the student's senior year for up to 12 credit hours.

Minors

In this section:

Minor Course Requirements

Requirements for academic minors are set by the department offering the minor. Substitutions may not be made without written approval of the minor department. Courses in the minor may not be taken pass/fail. A student may not complete a minor in his or her major field.

Process to Declare a Minor

To assure that completion of the minor is appropriately recognized and posted to the transcript, the student should: (1) formally declare the intent to complete a minor by submitting an Academic Status Update for General Student form with the appropriate minor code entered (techregistrar.wvutech.edu/forms (http://techregistrar.wvutech.edu/forms)); (2) consult with the academic advisor to incorporate course requirements for the minor into schedule planning; and (3) when applying to graduate and receive a diploma, indicate the minor for which certification is requested.

College of Business, Humanities and Social Sciences

General Information

The College of Business, Humanities and Social Sciences is one of two academic colleges at West Virginia University Institute of Technology. It includes many of the liberal and humanistic programs and courses commonly found in American colleges. These programs and courses make important contributions to the broad purposes of the institution, which endeavors to provide students with a knowledge of society, human experiences past and present, and the world in which we live; to foster an understanding and appreciation of the human, cultural, economic, political, environmental, ecological, and technological factors that have shaped human history and current concerns; and to develop the interests and creative capacities of students to their fullest extent.

The college offers courses necessary for the General Education Foundation (GEF). All four-year programs require between thirty-one and thirty-seven semester hours in GEF courses designed to meet the broad functions of the university and to assure students the breadth of knowledge deemed essential to an educated person. They include courses from the humanities, sciences, natural sciences, and mathematics.

The College of Business, Humanities and Social Sciences also has an important part in fulfilling the career-oriented functions of the institution, as well as preparing students for graduate/professional study. It provides a variety of programs, training persons to serve the business, industrial, and governmental needs of the state and nation and for service to the community through a wide range of online courses designed to meet the changing needs and interests of the region and the state.

Degree Options

The College of Business, Humanities and Social Sciences offers the following degrees:

- Bachelor of Art (B.A.) (p. 45)
- Bachelor of Science (B.S.) (p. 45)
- Regents Bachelor of Arts (R.B.A.)

Bachelor of Art Degree Programs

- History and Government
- Interdisciplinary Studies
- Psychology

Bachelor of Science Degree Programs

- Accounting
- Athletic Coaching Education
- Aviation Management
- Business Management
- Career-Technical Education
- Criminal Justice
- Forensic Investigation
- Health Services Administration
- Interdisciplinary Studies
- Public Service Administration
- Sport Management

Minors

- Accounting
- Business Administration
- Criminal Justice
- Economics
- Finance
- Fraud Examination
- History and Government

- Human Resources Administration
- Marketing
- Political Science
- Professional Writing and Editing
- Psychology
- Risk and Insurance
- Sociology
- Sport Management

Certificates

- Fraud Examination

In this section:

BHSS College Minor:

Department of Accounting and Business Management

Department of History, English, and Creative Arts

Department of Psychology

Department of Social Sciences and Public Administration

Department of Sport Studies

BHSS College Minor

ADVENTURE RECREATION MANAGEMENT

MINOR CODE - UT25

Required Courses		
ADRC 101	Essential Skills in Adventure Recreation	3
ADRC 103	Introduction to Adventure Recreation	3
ADRC 301	Adventure Recreation Program Management	3
ADRC 302	Adventure Travel and Tourism	3
ADRC 401	Ethical and Legal Issues in Adventure Programming	3
ADRC 491	Professional Field Experience	3
Introductory Skills Course *		1
ADRC 111	Introduction to Whitewater Rafting	
ADRC 121	Introduction to Rock Climbing	

ADRC 131	Introduction to Mountain Biking	
Technique Development Skills Course *		1
ADRC 112	Whitewater Rafting Techniques	
ADRC 122	Rock Climbing Techniques	
ADRC 211	Introduction to Whitewater Raft Guiding	
ADRC 212	Swiftwater Rescue	
ADRC 221	Lead Climbing	
ADRC 222	Climbing Rescue Techniques	
ADRC 311	Whitewater Raft Trip Leadership	
ADRC 321	Rock Climbing Instructor Development	
Total Hours		20

* Requires one introductory and one technique development course within the same area.

Department of Accounting and Business Management

ACCOUNTING

MINOR CODE - UT01

Required Courses		
ACCT 201	Principles of Accounting	3
ACCT 202	Principles of Accounting	3
ACCT 311	Intermediate Accounting	3
Select three of the following courses:		9
ACCT 312	Intermediate Accounting	
ACCT 322	Accounting Systems	
ACCT 348	Financial Statement Analysis	
ACCT 432	Advanced Cost Management	
ACCT 441	Income Tax Accounting 1	
ACCT 442	Income Tax Accounting 2	
ACCT 491	Professional Field Experience	
Total Hours		18

BUSINESS ADMINISTRATION

MINOR CODE - UT03

Required Courses		
ACCT 201	Principles of Accounting	3
ACCT 202	Principles of Accounting	3
BCOR 320	Legal Environment of Business	3
BCOR 350	Principles of Marketing	3
BCOR 370	Managing Individuals and Teams	3
CS 101	Intro to Computer Applications	4
FIN 325	Financial Management 1	3
MANG 386	Business Statistics	3
Total Hours		25

FINANCE

MINOR CODE - UT06

Required Courses		
ACCT 491	Professional Field Experience	3
ECON 331	Money and Banking	3
FIN 310	Investments	3

FIN 321	Personal Finance	3
FIN 325	Financial Management 1	3
FIN 326	Financial Management 2	3
Total Hours		18

FRAUD EXAMINATION
MINOR CODE - UT07

Required Courses		
ACCT 201	Principles of Accounting	3
ACCT 348	Financial Statement Analysis	3
ACCT 420	Fraud Examination	3
ACCT 421	Fraud Management: Legal/Ethical Issues	3
ACCT 422	Advanced Fraud Investigation & Analysis	3
ACCT 423	Information Security and Controls	3
Total Hours		18

HUMAN RESOURCES ADMINISTRATION
MINOR CODE - UT10

Required Courses		
MANG 330	Human Resource Management Fundamentals	3
MANG 422	The Individual and the Organization	3
Select three of the following:		9
ECON 430	Collective Bargaining	
HRMG 440	Training and Development	
MANG 350	Leadership In Business	
PSYC 350	Topics in Social Psychology	
Total Hours		15

MARKETING
MINOR CODE - UT13

Required Courses		
BCOR 350	Principles of Marketing	3
MKTG 380	Integrated Promotions	3
Select four of the following courses:		12
MKTG 315	Buyer Behavior	
MKTG 325	Marketing Research	
MKTG 410	Retail Management	
MKTG 420	Sales Management	
MKTG 485	Global Marketing	
Total Hours		18

Department of History, English, and Creative Arts

HISTORY AND GOVERNMENT
MINOR CODE - UT09

Required Courses		
POLS 102	Introduction to American Government	3
Select one of the following sets of courses:		6
HIST 152 & HIST 153	Growth of the American Nation to 1865 and Making of Modern America: 1865 to the Present	

HIST 179 & HIST 180	World History to 1500 and World History Since 1500	
POLS 300+ Level Courses		3
HIST 200+ Level Courses		9
Total Hours		21

PROFESSIONAL WRITING AND EDITING

MINOR CODE - UT23

Minimum 3.0 GPA in PWE courses.

Required Courses		
ENGL 301	Writing Theory and Practice	3
ENGL 302	Editing	3
Select one course from each of the three following groups:		9
Business and Technical Writing		
ENGL 304	Business and Professional Writing	
ENGL 305	Technical Writing	
Writing with Technology		
ENGL 303	Multimedia Writing	
ENGL 306	Topics in Humanities Computing	
Linguistics		
ENGL 221	The English Language	
ENGL 321	History of the English Language	
Total Hours		15

Department of Psychology

PSYCHOLOGY

MINOR CODE - UT17

A minimum grade of C- is required for all courses in the minor.

Required Courses		
PSYC 101	Introduction to Psychology	3
PSYC 202	Research Methods in Psychology	3
PSYC 301	Biological Foundations of Behavior	3-4
or PSYC 302	Behavior Principles	
Select one of the following courses:		3
PSYC 241	Introduction to Human Development	
PSYC 281	Introduction to Abnormal Psychology	
Select two of the following courses:		6
PSYC 331	History and Systems of Psychology	
PSYC 343	Child and Adolescent Development	
PSYC 351	Topics in Social Psychology	
PSYC 363	Personality Theory	
PSYC 382	Exceptional Children	
PSYC 424	Learning and Behavior Theory	
PSYC 474	Applied Behavior Analysis	
PSYC 491	Professional Field Experience	
PSYC 493	Special Topics	
PSYC 495	Independent Study	
Total Hours		18-19

Department of Social Sciences and Public Administration

CRIMINAL JUSTICE

MINOR CODE - UT21

A 2.0 GPA is required for all courses counted toward the minor.

Required Courses		
CJ 101	Introduction to Criminal Justice	3
CJ 233	Juvenile Justice	3
Select three of the following courses:		9
ACCT 421	Fraud Management: Legal/Ethical Issues	
CJ 310	Law Enforcement Administration	
CJ 320	Courts and Judicial Systems	
CJ 410	Criminal Investigations	
HUMS 320	Public Administration	
POLS 313	American Constitutional Law	
POLS 400	Terrorism and National Security	
SOCA 302	Deviant Behavior	
SOCA 311	Social Research Methods	
Total Hours		15

ECONOMICS

MINOR CODE - UT05

Must have 18 credit hours and 9 hours must be 300 or 400 level courses

Required Courses		
ECON 201	Principles of Microeconomics	3
ECON 202	Principles of Macroeconomics	3
ECON 301	Intermediate Micro-Economic Theory	3
Select three of the following:		9
ECON 225	Elementary Business and Economics Statistics	
ECON 331	Money and Banking	
ECON 401	Managerial Economics	
ECON 430	Collective Bargaining	
ECON 441	Public Economics	
Other ECON courses may be accepted with advisor approval.		
Total Hours		18

POLITICAL SCIENCE

MINOR CODE - UT16

Must have 18 credit hours and 9 hours must be 300 or 400 level courses.

Required Courses		
POLS 102	Introduction to American Government	3
POLS 260	Introduction to International Relations	3
POLS 319	Comparative Government	3
Select three of the following courses:		9
POLS 103	Global Political Issues	
POLS 220	State and Local Government	
POLS 313	American Constitutional Law	
POLS 400	Terrorism and National Security	
HUMS 320	Public Administration	

Advisor Approved POLS and HUMS Courses	
Total Hours	18

SOCIOLOGY

MINOR CODE - UT19

Must have 18 hours of sociology courses and 9 hours must be in 300 or 400 level sociology courses.

A 2.0 GPA is required for all courses counted toward the minor.		
Required Courses		
SOCA 101	Introduction to Sociology	3
Sociology (SOCA) Electives		15
(must include at least 9 credit hours of upper division courses)		
WGST 225	Women in Appalachia (may be included as part of the Sociology minor)	
Total Hours		18

Department of Sport Studies

SPORT MANAGEMENT

MINOR CODE - UT20

A minimum grade of C- is required for all courses in this minor.

Required Courses		
BCOR 350	Principles of Marketing	3
BCOR 370	Managing Individuals and Teams	3
SM 425	Sport Facility and Event Management	3
SM 485	Sport Management	3
SM 486	Sport Marketing & Sales	3
Select one of the following:		3
SM 370	Sport Finance and Economics	
SM 380	History and Philosophy of Sport	
Total Hours		18

Accounting

Degree Offered

- Bachelor of Science

Nature of Program

The accountant is concerned with all phases of business or government operation and, through the application of accurate cost analysis and accounting techniques, provides management with the facts and figures necessary to the management decision-making process. The accountant's decisions will determine the ultimate accuracy and validity of future management decisions.

The accounting curriculum at WVU Tech prepares the student for a broad range of positions in business and government. The program provides the student with strong accounting, business, and technical skills to be comptetitve in the modern technology-oriented job market. Graduates may pursue graduate work as well as seek such professional certifications as Certified Management Accountant (CMA), Certified Internal Auditor (CIA), Certified Fraud Examiners (CFE), and IRS Enrolled Agent (EA). The graduates are also qualified to sit for the Certified Public Accountant (CPA) Exam. However, to get the CPA certificate, they need an additional 30 undergraduate/graduate credit hours. Contact the department chair for details.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6

ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Minimum GPA of 2.0 is required in all ACCT courses.

GEF Elective Requirements (2, 4, 5, 6, and 7)		16
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
MATH 123	Finite Mathematics 1 (GEF 3)	3
CS 101	Intro to Computer Applications (GEF 8)	4
ACCT 201	Principles of Accounting (minimum grade of C-)	3
ACCT 202	Principles of Accounting (minimum grade of C-)	3
ACCT 311	Intermediate Accounting (minimum grade of C-)	3
ACCT 312	Intermediate Accounting (minimum grade of C-)	3
ACCT 323	Accounting Systems	3
ACCT 348	Financial Statement Analysis	3
ACCT 415	Advanced Accounting	3
ACCT 432	Advanced Cost Management	3
ACCT 441	Income Tax Accounting 1	3
ACCT 450	Accounting Technology	3
BCOR 320	Legal Environment of Business	3
BCOR 350	Principles of Marketing	3
BCOR 360	Supply Chain Management	3
BCOR 370	Managing Individuals and Teams	3
BLAW 420	Law for the Certified Public Accountant	3
BUSA 101	Introduction to Business	3
ECON 201	Principles of Microeconomics (GEF 8)	3
ECON 202	Principles of Macroeconomics (GEF 8)	3
ECON 331	Money and Banking	3
FIN 325	Financial Management 1	3
FIN 326	Financial Management 2	3
MANG 386	Business Statistics	3
WVUE 191	First Year Seminar	1
Restricted Electives (Select four of the following):		12
ACCT 420	Fraud Examination	
ACCT 421	Fraud Management: Legal/Ethical Issues	
ACCT 442	Income Tax Accounting 2	
ACCT 451	Auditing Theory	
ACCT 461	Accounting for Nonbusiness Entities	
ACCT 491	Professional Field Experience	

Electives	9
15 contact hours community service	
Take ETS Business Test which is offered once a year in April.	
Total Hours	120

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
MATH 123 (GEF 3)	3	ACCT 202	3
ACCT 201	3	CS 101 (GEF 8)	4
BUSA 101	3	GEF 5	3
WVUE 191	1	Elective	3
GEF 2	4		
	17		16

Second Year

Fall	Hours	Spring	Hours
ACCT 311	3	ACCT 312	3
BCOR 320	3	BLAW 420	3
ECON 201 (GEF 8)	3	ECON 202 (GEF 8)	3
MANG 386	3	GEF 6	3
GEF 4	3	GEF 7	3
	15		15

Third Year

Fall	Hours	Spring	Hours
ACCT 415	3	ACCT 323	3
ACCT 432	3	ACCT 348	3
BCOR 370	3	BCOR 350	3
FIN 325	3	FIN 326	3
Restricted Elective	3	Restricted Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
ACCT 441	3	ACCT 450	3
ENGL 305	3	BCOR 360	3
Restricted Elective	3	ECON 331	3
Elective	4	Restricted Elective	3
		Elective	2
	13		14

Total credit hours: 120

Major Learning Goals

ACCOUNTING

On completion of the program, students will be able to:

- Explain and apply the Generally Accepted Accounting Principles (GAAP) and IFRS.
- Demonstrate proficiency in manual and computerized accounting systems.
- Prepare, interpret and analyze financial statements.
- Demonstrate critical thinking, problem solving, and written communication skills.
- Discuss and apply the code of professional ethics for accountants.

Department of Accounting and Business Management Minors

ACCOUNTING

MINOR CODE - UT01

Required Courses		
ACCT 201	Principles of Accounting	3
ACCT 202	Principles of Accounting	3
ACCT 311	Intermediate Accounting	3
Select three of the following courses:		9
ACCT 312	Intermediate Accounting	
ACCT 322	Accounting Systems	
ACCT 348	Financial Statement Analysis	
ACCT 432	Advanced Cost Management	
ACCT 441	Income Tax Accounting 1	
ACCT 442	Income Tax Accounting 2	
ACCT 491	Professional Field Experience	
Total Hours		18

BUSINESS ADMINISTRATION

MINOR CODE - UT03

Required Courses		
ACCT 201	Principles of Accounting	3
ACCT 202	Principles of Accounting	3
BCOR 320	Legal Environment of Business	3
BCOR 350	Principles of Marketing	3
BCOR 370	Managing Individuals and Teams	3
CS 101	Intro to Computer Applications	4
FIN 325	Financial Management 1	3
MANG 386	Business Statistics	3
Total Hours		25

FINANCE

MINOR CODE - UT06

Required Courses		
ACCT 491	Professional Field Experience	3
ECON 331	Money and Banking	3
FIN 310	Investments	3
FIN 321	Personal Finance	3
FIN 325	Financial Management 1	3
FIN 326	Financial Management 2	3
Total Hours		18

FRAUD EXAMINATION

MINOR CODE - UT07

Required Courses		
ACCT 201	Principles of Accounting	3
ACCT 348	Financial Statement Analysis	3
ACCT 420	Fraud Examination	3
ACCT 421	Fraud Management: Legal/Ethical Issues	3
ACCT 422	Advanced Fraud Investigation & Analysis	3

ACCT 423	Information Security and Controls	3
Total Hours		18

HUMAN RESOURCES ADMINISTRATION

MINOR CODE - UT10

Required Courses		
MANG 330	Human Resource Management Fundamentals	3
MANG 422	The Individual and the Organization	3
Select three of the following:		9
ECON 430	Collective Bargaining	
HRMG 440	Training and Development	
MANG 350	Leadership In Business	
PSYC 350	Topics in Social Psychology	
Total Hours		15

MARKETING

MINOR CODE - UT13

Required Courses		
BCOR 350	Principles of Marketing	3
MKTG 380	Integrated Promotions	3
Select four of the following courses:		12
MKTG 315	Buyer Behavior	
MKTG 325	Marketing Research	
MKTG 410	Retail Management	
MKTG 420	Sales Management	
MKTG 485	Global Marketing	
Total Hours		18

Undergraduate Certificate Program in Fraud Examination

CERTIFICATE CODE - CM01

The undergraduate Certificate Program in Fraud Examination is offered online and designed to prepare entry-level public accountants, governmental accountants, law enforcement officers, other business and finance professionals for positions in fraud analysis, fraud investigation, and compliance in business, government and nonprofit organizations. The program provides skills necessary to prevent, detect, investigate, and deter perpetration of fraud and help enhance their opportunity for advancement in several career fields.

A minimum overall GPA of 2.0 is required for this certificate.

Required Courses		
ACCT 348	Financial Statement Analysis	3
ACCT 420	Fraud Examination *	3
ACCT 421	Fraud Management: Legal/Ethical Issues	3
ACCT 422	Advanced Fraud Investigation & Analysis	3
ACCT 423	Information Security and Controls	3
ACCT 449	Case Studies in Fraud Examination and Management	3
Total Hours		18

* Must have completed the pre-requisite course ACCT 201 in order to enroll in ACCT 420.

First Semester	**Hours**
Fall	
ACCT 420	3
ACCT 423	3
	6

Second Semester	Hours
Spring	
ACCT 348	3
ACCT 421	3
ACCT 422	3
	9

Third Semester	Hours
Summer or Fall	
ACCT 449	3
	3

Total credit hours: 18

Athletic Coaching Education

Degree Offered

- Bachelor of Science

Nature of Program

WVU Tech offers a Bachelor of Science degree in Physical Education (BSPED) with majors in Athletic Coaching Education (ACE) and in Sport Management (SM) in the College of Business, Humanities and Social Sciences (BHSS). The ACE major provides students with an opportunity to study coaching and the important roles coaches have in society. The major provides students with hands on practicum experience in coaching throughout the curriculum. BSPED graduates with the ACE major are employed as coaches, strength and conditioning specialists, and work in the health and fitness industry. In prior academic years the BSPED degree offered on the WVU Tech campus was conferred by the WVU College of Physical Activity and Sports Sciences (CPASS). Students declaring the ACE major in the Spring 2018 semester or a later semester will have BSPED degrees earned on the WVU Tech Beckley Campus conferred by WVU Tech - BHSS. Students declaring the ACE major in the Fall 2017 semester, and students enrolled in the ACE major in an earlier semester, may elect to have their diplomas reflect either WVU Tech - BHSS or WVU - CPASS as the college conferring the degree.

Admission Requirements

During the initial hours of course work, students may enroll in courses in the Pre-Athletic Coaching Education Program. Applicants must meet the following requirements for admission to the ACE major:

- Achieve a 2.5 GPA in all coursework at the time of application to ACE
- Achieve a C- or better in all Probationary ACE required courses (SEP 272, ACE 106, ACE 168, ACE 256, ACE 265, ATTR 121, PE 220, PE 221, PE 223, PET 124, PET 125, PET 175, and PET 244).
- All ACE Probationary required coursework completed (with advisor's approval, students may be admitted when they are within 9 hours of completing the Pre-ACE required coursework)
- 30 credits of GEF - MUST include the following (ENGL 101, MATH 121 or MATH 126, BIOL 111, CS 101, PSYC 241, WVUE 191, SEP 271, and SEP 272)
- West Virginia Coaching Certification
- Sport First Aid Certification
- CPR/AED Certification
- Signed ACE Admission Application

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6

F3 - Math & Quantitative Skills	3-4
F4 - Society & Connections	3
F5 - Human Inquiry & the Past	3
F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

A minimum GPA of 2.0 is required in all major coursework		
Minimum cumulative 2.5 GPA for graduation		
GEF Elective Requirements (1, 2, 3, 5, and 6)		19
ACE 105	Nutrition for Coaches	3
WVUE 191	First Year Seminar	1
Pre-Major Requirements		
A minimum GPA of 2.5 and a minimum grade of C- is required pre-major coursework.		
SEP 272	Psychological Perspectives of Sport (GEF 4)	3
ACE 106	Athletic Coaching Education	3
ACE 168	Sport Officiating	2
ACE 256	Principles and Problems of Coaching	3
ACE 265	Diversity and Sport	3
ATTR 121	Sport Injury Control and Management	3
PE 220	Striking and Field Games	1
PE 221	Invasion Games	1
PE 223	Net and Wall Games	1
PET 124	Human Body: Structure and Function	2
PET 125	Principles of Human Movement	2
PET 175	Motor Development	2
PET 244	Motor Learning and Performance	2
Major Requirements (Minimum grade of C- required in all courses)		
ACE 315	Sport for Exceptional Athlete (GEF 7)	3
ACE 330	Coaching Education Administration	3
ACE 368	Sport Movement Analysis	3
ACE 369	Basic Strength/Condtng-Coaches	3
ACE 410	Training Theories for Coaches	3
ACE 450	Career Planning in Sport	3
ACE 488	Practicum Coaching Exceptional Athletes	3
ACE 489	Practicum Coaching Youth Sport	3
ACE 491	Professional Field Experience	6
Techniques of Coaching Courses (Select two of the following):		4
ACE 361	Techniques of Coaching: Soccer	
ACE 362	Techniques of Coaching: Basketball	
ACE 364	Techniques of Coaching: Football	
ACE 365	Techniques of Coaching: Baseball	
ACE 366	Techniques of Coaching: Volleyball	
EXPH 365	Exercise Physiology 1	3
SM 426	Liability in Sport	3
Minor Requirements (Sport Management Minor)		18
Electives		11
First Aid/AED/CPR Certifications		

WVSSAC or NFHS Certification	
Passage of background check	
Negative TB test results	
Total Hours	120

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
WVUE 191	1	ACE 168	2
ACE 106	3	ACE 265	3
PE 220	1	PET 244	2
GEF 2	4	SEP 272 (GEF 4)	3
GEF 3	3	GEF 5	3
	15		16

Second Year

Fall	Hours	Spring	Hours
ACE 105	3	ATTR 121	3
ACE 256	3	PE 223	1
ACE 315 (GEF 7)	3	PET 125	2
PE 221	1	PET 175	2
PET 124	2	GEF 8	3
GEF 8	3	GEF 8	3
	15		14

Third Year

Fall	Hours	Spring	Hours
ACE 368	3	ACE 330	3
EXPH 365	3	ACE 410	3
Techniques of Coaching Course	2	Techniques of Coaching Course	2
Minor Course	3	Minor Course	3
Minor Course	3	Minor Course	3
Elective	2		
	16		14

Fourth Year

Fall	Hours	Spring	Hours
ACE 369	3	ACE 450	3
ACE 489	3	ACE 488	3
ACE 491	3	ACE 491	3
SM 426	3	Minor Course	3
GEF 6	3	Minor Course	3
	15		15

Total credit hours: 120

Major Learning Goals

ATHLETIC COACHING EDUCATION

This program has the following specific outcomes:

- Graduates may coach on the collegiate level
- Graduates may apply for graduate school and graduate assistantships in coaching
- Graduates may work in area businesses and coach locally
- Graduates will recognize the importance and significance of the role of coaching

- Graduates will recognize the importance of continuing emotional, intellectual, and physical development throughout their lives

Department of Sport Studies Minors

SPORT MANAGEMENT

MINOR CODE - UT20

A minimum grade of C- is required for all courses in this minor.

Required Courses		
BCOR 350	Principles of Marketing	3
BCOR 370	Managing Individuals and Teams	3
SM 425	Sport Facility and Event Management	3
SM 485	Sport Management	3
SM 486	Sport Marketing & Sales	3
Select one of the following:		3
SM 370	Sport Finance and Economics	
SM 380	History and Philosophy of Sport	
Total Hours		18

Aviation Management

Degree Awarded

- Bachelor of Science

Nature of Program

The Bachelor of Science in Aviation Management (BSAM) program will prepare graduates for employment in the aviation industry with emphasis on positions at regional airlines, including line pilots, instructor pilots, check airmen, and managerial roles. The degree allows students to obtain rigorous flight training in conjunction with the personal and intellectual growth afforded by a college program. These outcomes are achieved through successful completion of a solid foundation in business and management classes, in-depth aviation coursework, and the university's comprehensive general education foundation (GEF).

Airline hiring standards and Federal Aviation Administration (FAA) regulations require professional pilots to have significant flight experience prior to employment. The BSAM program allows students to receive flight training early in the program and subsequently build additional flight experience as instructor pilots while completing the remainder of the flight degree online. It is possible for BSAM students to complete 1500 flight hours by graduation.

ADMINISTRATION

CHAIR

- Frank Robbins
  Program Coordinator

FACULTY

ADJUNCT PROFESSOR

- John Sabel - Juris Doctor, American Airways Airbus Captain
  AVIA 484 - Aviation Safety, AVIA 489 - Aviation Law

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	

F2A/F2B - Science & Technology	4-6
F3 - Math & Quantitative Skills	3-4
F4 - Society & Connections	3
F5 - Human Inquiry & the Past	3
F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

GEF Elective Requirements (2, 3, 4, 5, 6, 7, and 8)		30
A minimum GPA of 2.0 is required in the following major courses.		
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
BCOR 350	Principles of Marketing	3
BCOR 370	Managing Individuals and Teams	3
MANG 330	Human Resource Management Fundamentals	3
MANG 350	Leadership In Business	3
MANG 422	The Individual and the Organization	3
AVIA 101	Private Pilot	3
AVIA 181	Professional Field Experience	3
AVIA 201	Instrument Rating	4
AVIA 231	Commercial Pilot	4
AVIA 241	Multi-Engine Rating	2
AVIA 281	Professional Field Experience 2	8
AVIA 380	Aviation Weather	3
AVIA 382	Aerodynamic and Aircraft Performance	3
AVIA 383	Aircraft Systems	3
AVIA 385	Air Traffic Control and Airspace	3
AVIA 480	Human Factors in Flight	3
AVIA 484	Aviation Safety	3
AVIA 486	Aviation Management and Leadership	3
AVIA 489	Aviation Law	3
Restricted AVIA Electives		12
AVIA 301	Principles of Aviation Instruction	
AVIA 302	Intial Flight Instructor	
AVIA 304	Instrument Flight Instructor	
AVIA 306	Advanced Flight Instructor	
AVIA 351	Crew Resource Management	
AVIA 352	ATP/Turbine Aircraft Operations	
AVIA 381	Professional Field Experience 3	
AVIA 483	Air Transportation	
AVIA 485	Aviation Economics	
AVIA 487	Aviation Security	
AVIA 488	Aviation Stories: Aviation and the Humanities	
Restricted Electives (ACCT, AVIA, BCOR, ECON, MANG, MKTG at 300-400 level)		6
Electives		3
Total Hours		120

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
AVIA 101	3	AVIA 201	4
AVIA 181	3	AVIA 231	4
AVIA 241	2	AVIA 281	3
AVIA 281	1	AVIA 385	3
AVIA 383	3	ENGL 102 (GEF 1)	3
ENGL 101 (GEF 1)	3		
	15		17

Second Year

Fall	Hours	Spring	Hours
AVIA 281	4	AVIA 380	3
AVIA 382	3	AVIA 484	3
Restricted AVIA Elective	6	Restricted AVIA Elective	3
		Elective	3
		GEF 2	3
	13		15

Third Year

Fall	Hours	Spring	Hours
AVIA 480	3	BCOR 350	3
BCOR 370	3	Restricted Elective	3
GEF 2	3	GEF 5	3
GEF 3	3	GEF 6	3
GEF 4	3	GEF 7	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
AVIA 489	3	AVIA 486	3
MANG 330	3	MANG 422	3
MANG 350	3	Restricted AVIA Elective	3
GEF 8	3	Restricted Elective	3
GEF 8	3	GEF 8	3
	15		15

Total credit hours: 120

Major Learning Goals

AVIATION MANAGEMENT

- Graduates will obtain the FAA certifications as outlines in the program in a timely manner.
- Graduates will have a cumulative pass rate on FAA practical tests (flight tests) of 80% or above. Individual students will repeat no more than two FAA practical tests during the course of the program.
- Graduates will develop a thorough knowledge of aeronautical theories, practices, regulations, and procedures.
- Graduates will develop the ability to think critically and communicate effectively.

Business Management

Degree Awarded

- Bachelor of Science

Nature of Program

Our program provides a broad understanding of management and leadership through a variety of courses in human resource management, marketing, organizational behavior, operations management, statistics and business strategy. Students develop critical written and verbal communications skills,

learn to integrate and synthesis information and improve upon leadership capabilities. Students have the flexibility to take a variety of electives to customize their major focusing on accounting, economics, finance, human resource administration and/or marketing.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

GEF Elective Requirements (2, 5, 6, and 7)		13
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
MATH 123	Finite Mathematics 1 (GEF 3)	3
CS 101	Intro to Computer Applications (GEF 8)	4
PSYC 101	Introduction to Psychology (GEF 4)	3
ACCT 201	Principles of Accounting	3
ACCT 202	Principles of Accounting	3
ACCT 331	Managerial Accounting	3
BCOR 320	Legal Environment of Business	3
BCOR 350	Principles of Marketing (minimum grade of C-)	3
BCOR 360	Supply Chain Management (minimum grade of C-)	3
BCOR 370	Managing Individuals and Teams (minimum grade of C-)	3
BCOR 460	Contemporary Business Strategy	3
BUSA 101	Introduction to Business	3
ECON 201	Principles of Microeconomics (GEF 8)	3
ECON 202	Principles of Macroeconomics (GEF 8)	3
ECON 301	Intermediate Micro-Economic Theory	3
FIN 325	Financial Management 1	3
MANG 330	Human Resource Management Fundamentals	3
MANG 375	Business Simulation	3
MANG 386	Business Statistics (minimum grade of C-)	3
MANG 420	Business Information Systems	3
MANG 422	The Individual and the Organization	3
MKTG 485	Global Marketing	3
WVUE 191	First Year Seminar	1

Marketing Elective (must be 300 or 400 level)	3
Restricted Electives (ACCT, BCOR, BLAW, ECON, FIN, MANG, MKTG must be 300 or 400 level)	18
Electives	9
15 hours of community service	
Take ETS Business Test which is offered once a year in April.	
Total Hours	120

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
MATH 123 (GEF 3)	3	ECON 201 (GEF 8)	3
BUSA 101	3	CS 101 (GEF 8)	4
WVUE 191	1	Elective	3
GEF 2	4	GEF 5	3
	14		16

Second Year

Fall	Hours	Spring	Hours
ACCT 201	3	ACCT 202	3
ECON 202 (GEF 8)	3	ENGL 305	3
BCOR 350	3	MANG 330	3
BCOR 370	3	Marketing Elective	3
GEF 6	3	Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
ACCT 331	3	PSYC 101 (GEF 4)	3
BCOR 320	3	BCOR 360	3
FIN 325	3	MKTG 485	3
MANG 386	3	Restricted Elective	3
Restricted Elective	3	Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
ECON 301	3	BCOR 460	3
MANG 420	3	MANG 375	3
MANG 422	3	Restricted Elective	6
Restricted Elective	6	GEF 7	3
	15		15

Total credit hours: 120

Major Learning Goals

BUSINESS MANAGEMENT

Upon successful completion of the program, students will be able to:

- Demonstrate proficient knowledge and skills within core business components
- Demonstrate proficiency in applying analytical abilities in business decision-making
- Demonstrate critical thinking and written communication skills
- Demonstrate the use of current business technology in basic decision-making applications
- Show the ability to work effectively in teams as a leader and a follower

Department of Accounting and Business Management Minors

ACCOUNTING

MINOR CODE - UT01

Required Courses

ACCT 201	Principles of Accounting	3
ACCT 202	Principles of Accounting	3
ACCT 311	Intermediate Accounting	3
Select three of the following courses:		9
ACCT 312	Intermediate Accounting	
ACCT 322	Accounting Systems	
ACCT 348	Financial Statement Analysis	
ACCT 432	Advanced Cost Management	
ACCT 441	Income Tax Accounting 1	
ACCT 442	Income Tax Accounting 2	
ACCT 491	Professional Field Experience	
Total Hours		18

BUSINESS ADMINISTRATION

MINOR CODE - UT03

Required Courses

ACCT 201	Principles of Accounting	3
ACCT 202	Principles of Accounting	3
BCOR 320	Legal Environment of Business	3
BCOR 350	Principles of Marketing	3
BCOR 370	Managing Individuals and Teams	3
CS 101	Intro to Computer Applications	4
FIN 325	Financial Management 1	3
MANG 386	Business Statistics	3
Total Hours		25

FINANCE

MINOR CODE - UT06

Required Courses

ACCT 491	Professional Field Experience	3
ECON 331	Money and Banking	3
FIN 310	Investments	3
FIN 321	Personal Finance	3
FIN 325	Financial Management 1	3
FIN 326	Financial Management 2	3
Total Hours		18

FRAUD EXAMINATION

MINOR CODE - UT07

Required Courses

ACCT 201	Principles of Accounting	3
ACCT 348	Financial Statement Analysis	3
ACCT 420	Fraud Examination	3
ACCT 421	Fraud Management: Legal/Ethical Issues	3
ACCT 422	Advanced Fraud Investigation & Analysis	3

ACCT 423	Information Security and Controls	3
Total Hours		18

HUMAN RESOURCES ADMINISTRATION

MINOR CODE - UT10

Required Courses		
MANG 330	Human Resource Management Fundamentals	3
MANG 422	The Individual and the Organization	3
Select three of the following:		9
ECON 430	Collective Bargaining	
HRMG 440	Training and Development	
MANG 350	Leadership In Business	
PSYC 350	Topics in Social Psychology	
Total Hours		15

MARKETING

MINOR CODE - UT13

Required Courses		
BCOR 350	Principles of Marketing	3
MKTG 380	Integrated Promotions	3
Select four of the following courses:		12
MKTG 315	Buyer Behavior	
MKTG 325	Marketing Research	
MKTG 410	Retail Management	
MKTG 420	Sales Management	
MKTG 485	Global Marketing	
Total Hours		18

Career-Technical Education

Degree Awarded

- Bachelor of Science

Nature of Program

The Department of Career-Technical Education provides opportunities for Industrial, Technical, Occupational Foods and Health Occupations teachers to meet State Department of Education certification requirements and pursue advanced professional development. These opportunities are provided through special summer sessions on campus and classes throughout West Virginia during the fall and spring semesters. Students, who meet the state requirements, take advantage of advanced professional development opportunities, and meet General Education Foundation requirements, will be awarded the Bachelor's Degree in Career-Technical Education. Enrollment is limited to those currently employed as teachers in a career-technical program area.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4

F4 - Society & Connections	3
F5 - Human Inquiry & the Past	3
F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

GEF Elective Requirements (2, 3, 4, 5, 6, 7, and 8)		28
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	6
PSYC 241	Introduction to Human Development	3
CTED 201	Introduction to Career Technical Education	3
CTED 301	Occupational Analysis	3
CTED 302	Course Construction and Planning in Career Technical Education	3
CTED 303	Organization and Management of School Shops and Laboratories	3
CTED 304	Safety in Career Technical Education	3
CTED 305	Methods of Examination in Career Technical Education	3
CTED 306	Coordination of Cooperative Career Technical Education	3
CTED 308	Application of Basic Skills in Career Technical Education	3
CTED 402	History and Philosophy of Career Technical Education	3
CTED 409	Coordination of Career Technical Youth Activities	3
CTED 421	Teaching Special Students in Career Technical Education	3
CTED 485	Teaching Methods in Career Technical Education	3
CTED 493	Special Topics (Advanced Computer Applications)	3
or CTED 307	Computer Applications in Career Technical Education	
Industrial Processes Courses (Occupational Update) *		15
CTED 422	Back to Industry Experience	
CTED 423	Industrial Processes	
CTED 424	Industrial Processes	
CTED 425	Industrial Processes	
Occupational Competency Exam		30
Total Hours		121

* Occupational Updating can be satisfied with a combination of CTED 422, 423 424, and/or 425.

Suggested Plan of Study

First Year

Fall	**Hours**	**Spring**	**Hours**
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
CTED 485	3	PSYC 241	3
GEF 5	3	CTED 201	3
GEF 8	3	CTED 307 or 493 (Advanced Computer Applications)	3
GEF 8	3	GEF 4	3
		GEF 8	3
	15		18

Second Year

Fall	**Hours**	**Spring**	**Hours**
CTED 304	3	CTED 301	3
CTED 308	3	CTED 303	3

GEF 2	4	CTED 409	3
GEF 6	3	GEF 3	3
GEF 7	3		
	16		12

Third Year

Fall	**Hours**	**Spring**	**Hours**
CTED 302	3	CTED 305	3
CTED 306	3	CTED 402	3
CTED 423	3	CTED 421	3
CTED 423	3	CTED 423	3
	12		12

Fourth Year

Fall	**Hours**	**Spring**	**Hours**
CTED 423	3	CTED 423	3
Occupational Competency Exam	15	Occupational Competency Exam	15
	18		18

Total credit hours: 121

Major Learning Goals

CAREER-TECHNICAL EDUCATION

Teachers completing the Career-Technical Education program will be able to:

- Incorporate learning goals into instructional plans
- Incorporate pending learning outcomes and learning objectives into instructional plans
- Incorporate student characteristics into instructional plans for purposes of instructional design
- Incorporate teacher characteristics into instructional plans
- Apply a personal framework for teaching in development of an instructional plan
- Plan instructional strategies that are consistent with intended learning outcomes and objectives
- Select, develop, and modify instructional materials to meet intended learning outcomes and objectives
- Determine appropriate classroom procedures and organizational strategies to support the instructional environment
- Incorporate information from various sources in planning for instruction
- Select assessment or evaluation strategies to measure learning outcomes, objectives, and instructional effectiveness
- Maintain a positive learning environment to support mastery of learning outcomes and objectives
- Communicate with students to provide a context for learning that is consistent with instructional plans
- Manage the instructional environment to enhance student learning and development consistent with instructional plans
- Implement a variety of instructional strategies and materials consistent with instructional plans
- Utilize questioning strategies consistent with instructional plans
- Provide verbal and/or nonverbal feedback to students
- Evaluate the effectiveness of the instructional process
- Evaluate student progress toward mastery of learning outcomes and objectives
- Organize, interpret, and summarize evaluation data for instructional planning and delivery and management
- Report student evaluation results to students, parents, and appropriate school administrative personnel
- Use available evaluation results
- Establish and implement a continuing education plan to meet personal and professional goals
- Demonstrate management skills to carry out non-teaching responsibilities
- Follow school policies, rules, and regulations
- Demonstrate skills necessary to work with school committees and community groups

Criminal Justice

Degree Awarded

- Bachelor of Science

Nature of Program

The Criminal Justice program is designed to provide a multidisciplinary understanding of crime and the criminal justice system, while increasing the student's ability to critically analyze issues associated with the field of criminal justice. The program prepares students for local, state, and federal law enforcement, corrections, courts, homeland security, investigation, and related careers. The program also offers an excellent background for those wishing to pursue graduate studies or law school. Among its notable features are courses in criminal law, law enforcement administration, criminal investigations, corrections, juvenile justice, research methodology, and a semester-long capstone practicum internship.

FACULTY

CHAIR

- Dr. Janis Rezek - PhD
  Sociology with emphasis in Gender relations

ASSISTANT PROFESSOR

- Dr. George Coroian - JD & PhD
  Criminology

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

GEF Requirements (2B, 5, and 6)		10
WVUE 191	First Year Seminar	1
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
MATH 123	Finite Mathematics 1 (GEF 3)	3
ECON 225	Elementary Business and Economics Statistics (GEF 8)	3
POLS 220	State and Local Government (GEF 8)	3
POLS 313	American Constitutional Law	3
PSYC 101	Introduction to Psychology (GEF 4)	3
SOCA 101	Introduction to Sociology (GEF 8)	3
SOCA 221	Families and Society	3
SOCA 232	Criminology	3
SOCA 235	Race and Ethnic Relations (GEF 7)	3
SOCA 302	Deviant Behavior	3

SOCA 311	Social Research Methods	3
SOCA 360	Women and Men in Society	3
SOCA 430	World Religions	3
CJ 101	Introduction to Criminal Justice	3
CJ 202	Principles of Criminal Law	3
CJ 310	Law Enforcement Administration	3
CJ 320	Courts and Judicial Systems	3
CJ 475	Seminar in Criminal Justice-Capstone	3
HUMS 100	Community Service	1
HUMS 210	Introduction to Welfare	3
HUMS 320	Public Administration	3
HUMS 489	Practicum Capstone Internship	6
Restricted Electives (6 credits must be 300-400 level)		24
ACCT 421	Fraud Management: Legal/Ethical Issues	
CJ 233	Juvenile Justice	
CJ 324	Drugs, Crime and Society	
CJ 240	Correctional Counseling	
CJ 316	Community Based Corrections	
CJ 410	Criminal Investigations	
FRNX 315	Interviewing Theory	
FRNX 318	Crime Scenes	
POLS 102	Introduction to American Government	
POLS 400	Terrorism and National Security	
PSYC 281	Introduction to Abnormal Psychology	
SOCA 105	Introduction to Anthropology	
SOCA 207	Social Problems in Contemporary America	
SOCA 305	Social Stratification Social and Power in American Society	
SOCA 324	Gender and Crime	
Electives		9
Total Hours		120

Suggested Plan of Study

First Year

Fall	**Hours**	**Spring**	**Hours**
WVUE 191	1	SOCA 101 (GEF 8)	3
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
CJ 101	3	HUMS 210	3
MATH 123 (GEF 3)	3	SOCA 232	3
GEF 2B	4	Elective	3
GEF 5	3		
	17		15

Second Year

Fall	**Hours**	**Spring**	**Hours**
PSYC 101 (GEF 4)	3	HUMS 100	1
CJ 202	3	POLS 220 (GEF 8)	3
ENGL 305	3	SOCA 221	3
Restricted Elective	3	ECON 225 (GEF 8)	3
Elective	3	Restricted Elective	6
	15		16

Third Year

Fall	**Hours**	**Spring**	**Hours**
SOCA 302	3	SOCA 235 (GEF 7)	3

SOCA 311	3	CJ 310	3
HUMS 320	3	CJ 320	3
SOCA 360	3	SOCA 430	3
Restricted Elective	3	Restricted Elective (300-400)	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
POLS 313	3	HUMS 489	6
CJ 475	3	Restricted Electives	6
GEF 6	3		
Restricted Elective (300-400)	3		
Elective	3		
	15		12

Total credit hours: 120

Law Enforcement Area of Emphasis

CJ 233	Juvenile Justice	3
CJ 324	Drugs, Crime and Society	3
CJ 410	Criminal Investigations	3
POLS 400	Terrorism and National Security	3
Total Hours		12

Corrections Area of Emphasis

CJ 233	Juvenile Justice	3
CJ 240	Correctional Counseling	3
CJ 316	Community Based Corrections	3
SOCA 207	Social Problems in Contemporary America	3
Total Hours		12

Major Learning Goals

CRIMINAL JUSTICE

The Criminal Justice program has the following learning outcomes:

- The student will be able to critically analyze decision points and outcome potentials at each stage of the criminal justice process.
- The student will be able to apply scientific methods to criminal justice research issues.
- The student will be able to effectively communicate in written and verbal form.
- The student will become culturally competent and know the importance of diversity within the criminal justice system and the community.

Department of Social Sciences & Public Administration Minors

CRIMINAL JUSTICE

MINOR CODE - UT21

A 2.0 GPA is required for all courses counted toward the minor.

Required Courses		
CJ 101	Introduction to Criminal Justice	3
CJ 233	Juvenile Justice	3
Select three of the following courses:		9
ACCT 421	Fraud Management: Legal/Ethical Issues	
CJ 310	Law Enforcement Administration	
CJ 320	Courts and Judicial Systems	
CJ 410	Criminal Investigations	
HUMS 320	Public Administration	

POLS 313	American Constitutional Law	
POLS 400	Terrorism and National Security	
SOCA 302	Deviant Behavior	
SOCA 311	Social Research Methods	
Total Hours		15

ECONOMICS

MINOR CODE - UT05

Must have 18 credit hours and 9 hours must be 300 or 400 level courses

Required Courses		
ECON 201	Principles of Microeconomics	3
ECON 202	Principles of Macroeconomics	3
ECON 301	Intermediate Micro-Economic Theory	3
Select three of the following:		9
ECON 225	Elementary Business and Economics Statistics	
ECON 331	Money and Banking	
ECON 401	Managerial Economics	
ECON 430	Collective Bargaining	
ECON 441	Public Economics	
Other ECON courses may be accepted with advisor approval.		
Total Hours		18

POLITICAL SCIENCE

MINOR CODE - UT16

Must have 18 credit hours and 9 hours must be 300 or 400 level courses.

Required Courses		
POLS 102	Introduction to American Government	3
POLS 260	Introduction to International Relations	3
POLS 319	Comparative Government	3
Select three of the following courses:		9
POLS 103	Global Political Issues	
POLS 220	State and Local Government	
POLS 313	American Constitutional Law	
POLS 400	Terrorism and National Security	
HUMS 320	Public Administration	
Advisor Approved POLS and HUMS Courses		
Total Hours		18

SOCIOLOGY

MINOR CODE - UT19

Must have 18 hours of sociology courses and 9 hours must be in 300 or 400 level sociology courses.

A 2.0 GPA is required for all courses counted toward the minor.

Required Courses		
SOCA 101	Introduction to Sociology	3
Sociology (SOCA) Electives		15
(must include at least 9 credit hours of upper division courses)		
WGST 225	Women in Appalachia (may be included as part of the Sociology minor)	
Total Hours		18

Forensic Investigation

Degree Awarded

- Bachelor of Science

Nature of Program

The curriculum of the program emphasizes breadth of knowledge and the development of analytical skills. Familiarity with fundamental theories and practices within the social and natural sciences, enhanced communication skills, and an understanding of the limits and uses of forensic techniques form a base from which the student develops either a plan for entry into a graduate program or a career path. The program emphasizes the historical evolution of investigative techniques and terminology and the use of scientific methods to reconstruct the recent past. The program's primary focus is on investigation, although lab techniques and analyses are incorporated into the course work. The program is appropriate for those planning a career as investigators, as well as, current practitioners. Students also have the flexibility to select specific courses to prepare them for future work in a forensic laboratory or graduate school admission. The curriculum combines class instruction, hands-on laboratory and practical field applications. Among the program's notable features are a course in research methods, a senior thesis, and a capstone practicum internship that places the student in a supervised setting for professional competence development.

While WVU Institute of Technology is a division of West Virginia University, WVU Tech offers some programs that are separate and distinct from WVU main campus in Morgantown. The WVU main campus offers a B.S. program in Forensic and Investigative Science (FIS). The WVU Tech campus offers a B.S. program in Forensic Investigation (FRNX). These are separate and distinct programs. The WVU-Morgantown FIS program's accreditation is through the American Academy of Forensic Sciences (AAFS) does not encompass the WVU Tech FRNX program. WVU Tech courses labeled FRNX will not transfer into the WVU-Morgantown FIS program.

FACULTY

CHAIR

- Dr. Janis E. Rezek - PhD Sociology
  Emphasis in Gender Studies

ASSOCIATE PROFESSOR

- Andrew Wheeler - Masters of Forensic Science
  Forensic Investigation

ASSISTANT PROFESSOR

- Roger L. Jefferys II - MS in Forensic and Investigative Science

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

A minimum GPA of 2.0 across all courses applied to the major		
GEF Elective Requirements (5, 6, and 7)		9
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
Select one of the following or higher (GEF 3):		3
MATH 126A	College Algebra 5-Day	
MATH 126B	College Algebra 4-Day	
MATH 126C	College Algebra 3-Day	
ECON 225	Elementary Business and Economics Statistics (GEF 8)	3
or STAT 211	Elementary Statistical Inference	
CHEM 111	Survey of Chemistry (GEF 2)	4
or CHEM 115	Fundamentals of Chemistry	
CHEM 112	Survey of Chemistry (GEF 2)	4
or CHEM 116	Fundamentals of Chemistry	
PHSC 101	Introductory Physical Science 1 (GEF 8)	4
CS 101	Intro to Computer Applications	4
POLS 102	Introduction to American Government	3
or POLS 220	State and Local Government	
POLS 313	American Constitutional Law	3
PSYC 101	Introduction to Psychology (GEF 8)	3
SOCA 101	Introduction to Sociology (GEF 4)	3
SOCA 311	Social Research Methods	3
or PSYC 202	Research Methods in Psychology	
CJ 101	Introduction to Criminal Justice (minimum grade of C)	3
CJ 202	Principles of Criminal Law (minimum grade of C)	3
CJ 320	Courts and Judicial Systems (minimum grade of C)	3
FRNX 101	Introduction to Forensic Investigation (minimum grade of C)	3
FRNX 210	Fingerprint Evidence Analysis (minimum grade of C)	4
FRNX 212	Advanced Fingerprint Evidence (minimum grade of C)	3
FRNX 301	Investigative Photography (minimum grade of C)	3
FRNX 310	Firearms and Tool Marks (minimum grade of C)	3
FRNX 311	Trace and Blood Spatter (minimum grade of C)	3
FRNX 315	Interviewing Theory (minimum grade of C)	3
FRNX 316	Death Investigation (minimum grade of C)	3
FRNX 318	Crime Scenes (minimum grade of C)	3
FRNX 484	Senior Seminar in Forensic Investigation (minimum grade of C)	3
FRNX 496	Senior Thesis (minimum grade of C)	3
HUMS 489	Practicum Capstone Internship (minimum grade of C-)	6
WVUE 191	First Year Seminar	1
Restricted Electives		15
ACCT 420	Fraud Examination	
ACCT 422	Advanced Fraud Investigation & Analysis	
CSAD 270	Effective Public Speaking	
COMM 100	Principles of Human Communication	
POLS 400	Terrorism and National Security	
Any FRNX, CJ, or SOCA course (must be approved by an advisor and must not be an already required course)		
Any CHEM, BIOL, MATH, or PHYS course (must be approved by an advisor and must meet the pre-requisite requirements for each course)		
HUMS 489	Practicum Capstone Internship (may include up to 6 additional hours with advisor approval)	
Total Hours		120

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
Select one of the following or higher (GEF 3):	3	CHEM 112 or 116 (GEF 2)	4
MATH 126A		CS 101	4
MATH 126B		SOCA 101 (GEF 4)	3
MATH 126C		GEF 5	3
CHEM 111 or 115 (GEF 2)	4		
CJ 101	3		
FRNX 101	3		
WVUE 191	1		
	17		17

Second Year

Fall	Hours	Spring	Hours
ENGL 305	3	ECON 225 or STAT 211 (GEF 8)	3
PHSC 101 (GEF 8)	4	POLS 102 or 220	3
PSYC 101 (GEF 8)	3	FRNX 212	3
CJ 202	3	GEF 6	3
FRNX 210	4	GEF 7	3
	17		15

Third Year

Fall	Hours	Spring	Hours
FRNX 301	3	CJ 320	3
FRNX 311	3	FRNX 310	3
FRNX 315	3	FRNX 316	3
POLS 313	3	FRNX 318	3
Restricted Elective	3	Restricted Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
SOCA 311 or PSYC 202	3	FRNX 484	3
Restricted Elective	3	FRNX 496	3
Restricted Elective	3	HUMS 489	6
Restricted Elective	3	Elective (if needed)	
	12		12

Total credit hours: 120

Major Learning Goals

FORENSIC INVESTIGATION

This program has the following specific outcomes:

- The student will be able to demonstrate knowledge of the language, history, and traditions of the forensic discipline and the investigative professions.
- The student will be able to use critical thinking and problem solving in an investigative situation.
- The student will be able to effectively communicate in an interviewing, investigative, and in legal settings both verbally and in writing.
- Students will have an appreciation of the ethical, legal, and regulatory issues impacting the decision making process.
- Students will be able to apply the technical skills necessary to conduct investigative work.

Department of Social Sciences & Public Administration Minors

CRIMINAL JUSTICE

MINOR CODE - UT21

A 2.0 GPA is required for all courses counted toward the minor.

Required Courses		
CJ 101	Introduction to Criminal Justice	3
CJ 233	Juvenile Justice	3
Select three of the following courses:		9
ACCT 421	Fraud Management: Legal/Ethical Issues	
CJ 310	Law Enforcement Administration	
CJ 320	Courts and Judicial Systems	
CJ 410	Criminal Investigations	
HUMS 320	Public Administration	
POLS 313	American Constitutional Law	
POLS 400	Terrorism and National Security	
SOCA 302	Deviant Behavior	
SOCA 311	Social Research Methods	
Total Hours		15

ECONOMICS

MINOR CODE - UT05

Must have 18 credit hours and 9 hours must be 300 or 400 level courses

Required Courses		
ECON 201	Principles of Microeconomics	3
ECON 202	Principles of Macroeconomics	3
ECON 301	Intermediate Micro-Economic Theory	3
Select three of the following:		9
ECON 225	Elementary Business and Economics Statistics	
ECON 331	Money and Banking	
ECON 401	Managerial Economics	
ECON 430	Collective Bargaining	
ECON 441	Public Economics	
Other ECON courses may be accepted with advisor approval.		
Total Hours		18

POLITICAL SCIENCE

MINOR CODE - UT16

Must have 18 credit hours and 9 hours must be 300 or 400 level courses.

Required Courses		
POLS 102	Introduction to American Government	3
POLS 260	Introduction to International Relations	3
POLS 319	Comparative Government	3
Select three of the following courses:		9
POLS 103	Global Political Issues	
POLS 220	State and Local Government	
POLS 313	American Constitutional Law	
POLS 400	Terrorism and National Security	
HUMS 320	Public Administration	

Advisor Approved POLS and HUMS Courses		
Total Hours		18

SOCIOLOGY

MINOR CODE - UT19

Must have 18 hours of sociology courses and 9 hours must be in 300 or 400 level sociology courses.

A 2.0 GPA is required for all courses counted toward the minor.		
Required Courses		
SOCA 101	Introduction to Sociology	3
Sociology (SOCA) Electives		15
(must include at least 9 credit hours of upper division courses)		
WGST 225	Women in Appalachia (may be included as part of the Sociology minor)	
Total Hours		18

Health Services Administration

Degree Awarded

- Bachelor of Science

Nature of Program

The Department of Social Sciences and Public Administration offers an interdisciplinary major in Health Services Administration leading to the Bachelor of Science degree. The program recognizes that many agencies and organizations require personnel with a strong background in both the sciences and management for research, service, and administrative positions.

A wide variety of career opportunities exist in a wide variety of organizations because health care broadly impacts society. Potential employment settings include: hospitals, clinics or ambulatory care centers; mental health agencies; prepaid health maintenance organizations; health insurance companies; federal, state, and local governmental health agencies; and health specialty vendors.

The program promotes an interdisciplinary perspective in health services administration that encompasses sciences with a public health emphasis and an orientation in business principles. With careful planning, a student may minor in one or more of the following: history and government, economics, business administration, political science, or sociology.

Distinctive features of the program in Health Services Administration include a wide assortment of classes in business, political science, economics, and other applied areas. Program courses include Introduction to Health Care Organizations, Health Services Planning, Health Services Law and Legislation, and Illness and Health Care. In addition, each student must complete a semester-long supervised capstone experience in which the student gains academic credit for administrative exposure in a cooperating health related organization

For students holding an associate degree or a diploma from a three-year nursing program, the program participates in articulation agreements providing credit for coursework taken at the community college level toward achievement of the B.S. degree.

FACULTY

CHAIR

- Janis E. Rezek - PhD Sociology
  Gender Studies

ASSOCIATE PROFESSOR

- Thomas McGraw - MHA

ASSISTANT PROFESSOR

- Amanda E. McCarty - MS, MS-HCA, MBA

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations

F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

GEF Elective Requirements (2, 5, 6, 7, and 8)		16
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
MATH 123	Finite Mathematics 1 (GEF 3)	3
POLS 220	State and Local Government (GEF 8)	3
POLS 480	Seminar in Non-Profit Administration	3
PSYC 101	Introduction to Psychology	3
SOCA 101	Introduction to Sociology (GEF 4)	3
SOCA 207	Social Problems in Contemporary America	3
or SOCA 235	Race and Ethnic Relations	
SOCA 325	Illness and Health Care	3
SOCA 333	Sociology of Work and Work Places	3
BCOR 350	Principles of Marketing	3
BUSA 101	Introduction to Business	3
ECON 201	Principles of Microeconomics	3
ECON 202	Principles of Macroeconomics	3
ECON 225	Elementary Business and Economics Statistics (GEF 8)	3
ECON 441	Public Economics	3
HUMS 100	Community Service	1
HUMS 210	Introduction to Welfare	3
HUMS 300	Introduction to Health Care Organizations	3
HUMS 320	Public Administration	3
HUMS 330	Health Insurance	3
HUMS 400	Health Services Law and Legislation	3
HUMS 410	Fundamentals of Health Care Administration	3
HUMS 420	Principle of Microhealthcare Finance	3
HUMS 421	Principles of Macrohealth Care Finance	3
HUMS 430	Medical Ethics	3
HUMS 440	Long Term Care Administration	3
HUMS 470	Health Services Planning	3
HUMS 489	Practicum Capstone Internship	6
WVUE 191	First Year Seminar	1
Restricted Electives in ACCT, ECON, POLS, SOCA, HUMS		12
Total Hours		120

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
MATH 123 (GEF 3)	3	PSYC 101	3
SOCA 101 (GEF 4)	3	HUMS 100	1
WVUE 191	1	GEF 6	3
GEF 2	4	GEF 7	3
		GEF 8	3
	14		16

Second Year

Fall	Hours	Spring	Hours
BUSA 101	3	ECON 202	3
ECON 201	3	ECON 225 (GEF 8)	3
ENGL 305	3	HUMS 210	3
HUMS 300	3	POLS 220 (GEF 8)	3
SOCA 207 or 235	3	GEF 5	3
	15		15

Third Year

Fall	Hours	Spring	Hours
HUMS 320	3	HUMS 400	3
HUMS 330	3	HUMS 410	3
HUMS 420	3	HUMS 421	3
HUMS 430	3	HUMS 440	3
SOCA 325	3	Restricted Elective	3
Restricted Elective	3		
	18		15

Fourth Year

Fall	Hours	Spring	Hours
BCOR 350	3	HUMS 489	6
ECON 441	3	POLS 480	3
HUMS 470	3	SOCA 333	3
Restricted Elective	6		
	15		12

Total credit hours: 120

Major Learning Goals

HEALTH SERVICES ADMINISTRATION

This program has the following specific outcomes:

- The student will demonstrate a broad based understanding of the dynamics of the health care industry, including familiarity with a variety of care delivery organizations, types of care delivery methods, and fiscal responsibilities.
- The student will be able to apply critical thinking and higher level analytical skills to problems and issues in their career fields.
- The student will be able to communicate effectively in oral and written form and use specialized vocabulary utilized in the health care industry in the appropriate context.
- The student will become culturally competent and know about the importance of diversity in the work environment

Department of Social Sciences & Public Administration Minors

CRIMINAL JUSTICE

MINOR CODE - UT21

A 2.0 GPA is required for all courses counted toward the minor.

Required Courses		
CJ 101	Introduction to Criminal Justice	3
CJ 233	Juvenile Justice	3
Select three of the following courses:		9
ACCT 421	Fraud Management: Legal/Ethical Issues	
CJ 310	Law Enforcement Administration	
CJ 320	Courts and Judicial Systems	
CJ 410	Criminal Investigations	
HUMS 320	Public Administration	
POLS 313	American Constitutional Law	
POLS 400	Terrorism and National Security	
SOCA 302	Deviant Behavior	
SOCA 311	Social Research Methods	
Total Hours		15

ECONOMICS

MINOR CODE - UT05

Must have 18 credit hours and 9 hours must be 300 or 400 level courses

Required Courses		
ECON 201	Principles of Microeconomics	3
ECON 202	Principles of Macroeconomics	3
ECON 301	Intermediate Micro-Economic Theory	3
Select three of the following:		9
ECON 225	Elementary Business and Economics Statistics	
ECON 331	Money and Banking	
ECON 401	Managerial Economics	
ECON 430	Collective Bargaining	
ECON 441	Public Economics	
Other ECON courses may be accepted with advisor approval.		
Total Hours		18

POLITICAL SCIENCE

MINOR CODE - UT16

Must have 18 credit hours and 9 hours must be 300 or 400 level courses.

Required Courses		
POLS 102	Introduction to American Government	3
POLS 260	Introduction to International Relations	3
POLS 319	Comparative Government	3
Select three of the following courses:		9
POLS 103	Global Political Issues	
POLS 220	State and Local Government	
POLS 313	American Constitutional Law	
POLS 400	Terrorism and National Security	
HUMS 320	Public Administration	
Advisor Approved POLS and HUMS Courses		
Total Hours		18

SOCIOLOGY

MINOR CODE - UT19

Must have 18 hours of sociology courses and 9 hours must be in 300 or 400 level sociology courses.

A 2.0 GPA is required for all courses counted toward the minor.

Required Courses		
SOCA 101	Introduction to Sociology	3
Sociology (SOCA) Electives		15
(must include at least 9 credit hours of upper division courses)		
WGST 225	Women in Appalachia (may be included as part of the Sociology minor)	
Total Hours		18

History and Government

Degree Awarded

- Bachelor of Arts

Nature of Program

The History and Government program has three essential purposes. First, it is designed to provide the student with insights into historical time periods of the nation and the world, with special emphasis upon political, social, economic, and technological changes. Secondly, it provides a strong background for graduate study in history and related fields, careers in government, services, and some areas of business, and positions with historical societies and museums. Thirdly, for students interested in attending law school, the program meets and exceeds the criteria for pre-law curricula established by the American Association of Law Schools.

FACULTY

CHAIR

- Patricia Kihn - Ph.D. (Wayne State University)

PROFESSOR

- Paul H. Rakes - Ph.D. (West Virginia University)

ASSISTANT PROFESSOR

- Melissa Sartore - Ph.D. (University of Wisconsin-Madison)

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

A minimum GPA of a 2.0 in all major coursework is required..	
GEF Elective Requirements (2, 3, 4, 6, 7, and 8)	25

ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
CSAD 270	Effective Public Speaking	3
GEOG 108	Human Geography	3
HIST 152	Growth of the American Nation to 1865 (GEF 5)	3
HIST 153	Making of Modern America: 1865 to the Present	3
HIST 179	World History to 1500	3
HIST 180	World History Since 1500	3
HIST 203	Introduction to Medieval Europe	3
HIST 261	Recent America: The United States since 1918	3
HIST 277	Revolutions in Science and Technology	3
HIST 300	Greece and Rome	3
HIST 375	Hollywood and History	3
HIST 473	Appalachian Regional History	3
HIST 484	Historical Research-Capstone	3
HUMS 480	Grant Writing and Documentation	3
POLS 102	Introduction to American Government	3
POLS 260	Introduction to International Relations	3
PSYC 351	Topics in Social Psychology	3
SOCA 101	Introduction to Sociology	3
WVUE 191	First Year Seminar	1
Literature or Foreign Language Elective		3
Economics Elective (must be 300 or 400 level)		3
English Elective (must be 300 or 400 level)		3
History Elective (must be 300 or 400 level)		6
Political Science Elective (must be 300 or 400 level)		6
Restricted Electives (must be 300 or 400 level) HIST, ECON, ENTR, PHIL, POLS, ENGL, SOCA, BCOR, MANG, MKTG, ACCT, PSYC, CJ, FRNX		9
Electives		4
Total Hours		120

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
History Program Entrance Exam		ENGL 102 (GEF 1)	3
ENGL 101 (GEF 1)	3	HIST 153	3
HIST 152 (GEF 5)	3	POLS 102	3
WVUE 191	1	GEF 4	3
Elective	1	GEF 6	3
GEF 2	4		
GEF 3	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
HIST 179	3	HIST 180	3
GEOG 108	3	HIST 277	3
GEF 7	3	POLS 260	3
GEF 8	3	SOCA 101	3
GEF 8	3	GEF 8	3
	15		15

Third Year

Fall	Hours	Spring	Hours
CSAD 270	3	HIST 261	3
HIST 203	3	PSYC 351	3
Literature or Foreign Language Elective	3	English Elective (must be 300 or 400 level)	3
Political Science Elective (must be 300 or 400 level)	3	Political Science Elective (must be 300 or 400 level)	3
Restricted Elective (must be 300 or 400 level)	3	Restricted Elective (must be 300 or 400 level)	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
HIST 300	3	HIST 375	3
HIST 473	3	HIST 484	3
Economics Elective (must be 300 or 400 level)	3	HUMS 480	3
History Elective (must be 300 or 400 level)	3	History Elective (must be 300 or 400 level)	3
Elective or Minor	3	Restricted Elective (must be 300 or 400 level)	3
		Assessment Exam	
	15		15

Total credit hours: 120

Major Learning Goals

HISTORY AND GOVERNMENT

Graduates of this program should be able to:

- Demonstrate a general knowledge of the facts, concepts, and approaches of history
- Critically analyze and assess primary sources
- Critically analyze and assess secondary sources
- Conduct original historical research and report results orally and in writing
- Produce historical essays that are coherent, grammatically correct, and use proper historical documentation

Department of History, English, and Creative Arts Minors

HISTORY AND GOVERNMENT

MINOR CODE - UT16

Must have 18 credit hours and 9 hours must be 300 or 400 level courses.

Required Courses		
POLS 102	Introduction to American Government	3
POLS 260	Introduction to International Relations	3
POLS 319	Comparative Government	3
Select three of the following courses:		9
POLS 103	Global Political Issues	
POLS 220	State and Local Government	
POLS 313	American Constitutional Law	
POLS 400	Terrorism and National Security	
HUMS 320	Public Administration	
Advisor Approved POLS and HUMS Courses		
Total Hours		18

PROFESSIONAL WRITING AND EDITING

MINOR CODE - UT23

Minimum 3.0 GPA in PWE courses.

Required Courses		
ENGL 301	Writing Theory and Practice	3

ENGL 302	Editing	3
Select one course from each of the three following groups:		9
Business and Technical Writing		
ENGL 304	Business and Professional Writing	
ENGL 305	Technical Writing	
Writing with Technology		
ENGL 303	Multimedia Writing	
ENGL 306	Topics in Humanities Computing	
Linguistics		
ENGL 221	The English Language	
ENGL 321	History of the English Language	
Total Hours		15

Interdisciplinary Studies

Degrees Awarded

- Bachelor of Arts
- Bachelor of Science

Nature of Program

The WVU Tech student who is studying Interdisciplinary Studies (IDS) in the College of Business, Humanities, and Social Sciences is provided the unique opportunity to develop his/her own flexible Program of Study toward either a Bachelor of Science or Bachelor of Arts degree that represents their personal and career goals. Students work closely with the IDS Program Advisor in structuring their program and completing their degree program. Based upon the student's selected areas of study, this unique degree option includes elective opportunities that can be used to further develop knowledge in the selected areas of study, related areas, or career-oriented courses. Each student's self-designed program of interdisciplinary study is what makes an IDS degree unique.

Areas of Study

The following list of areas of study represents a few of the many possibilities for combining two or three areas of study and scholarship uniquely available to IDS students. More options than those presented below are available throughout the university

- Accounting
- Criminal Justice
- English Studies
- Fraud Examination
- Psychology
- Sociology
- Business Management
- Political Science
- Economics
- Accounting and Finance
- History and Government
- Marketing
- Risk and Insurance
- Sport Management

Students are encouraged to explore IDS Program options. Students considering entering into the degree program who wish to identify areas of study other than those in the above Core List should make arrangements to meet with the IDS Program Advisor to discuss their choices.

FACULTY

ASSISTANT PROFESSOR

- Rachel Lanier Bragg - Ph.D. (Old Dominion University)

In this section:

Department of Accounting and Finance

ACCOUNTING

MINOR CODE - UT01

Required Courses		
ACCT 201	Principles of Accounting	3
ACCT 202	Principles of Accounting	3
ACCT 311	Intermediate Accounting	3
Select three of the following courses:		9
ACCT 312	Intermediate Accounting	
ACCT 322	Accounting Systems	
ACCT 348	Financial Statement Analysis	
ACCT 432	Advanced Cost Management	
ACCT 441	Income Tax Accounting 1	
ACCT 442	Income Tax Accounting 2	

ACCT 491	Professional Field Experience	
Total Hours		18

FINANCE

MINOR CODE - UT06

Required Courses

ACCT 491	Professional Field Experience	3
ECON 331	Money and Banking	3
FIN 310	Investments	3
FIN 321	Personal Finance	3
FIN 325	Financial Management 1	3
FIN 326	Financial Management 2	3
Total Hours		18

FRAUD EXAMINATION

MINOR CODE - UT07

Required Courses

ACCT 201	Principles of Accounting	3
ACCT 348	Financial Statement Analysis	3
ACCT 420	Fraud Examination	3
ACCT 421	Fraud Management: Legal/Ethical Issues	3
ACCT 422	Advanced Fraud Investigation & Analysis	3
ACCT 423	Information Security and Controls	3
Total Hours		18

Department of Biology

BIOLOGY

MINOR CODE - UT02

Required Courses

BIOL 111	General Biology	4
BIOL 112	General Biology	4
BIOL Electives (must include at least 9 credit hours of upper division courses)		16
Total Hours		24

Department of Computer Science and Information Systems

COMPUTER SCIENCE

MINOR CODE - UT24

Student must earn a grade of C or better for each of the courses counted towards the minor.

Required Courses		
CS 121	Computer Science 1	4
CS 122	Computer Science 2	4
Complete the requirements for one of the following tracks:		8-9
Programming Track		
CS 201	Data Structures	
CS 222	Intro Software Engineering	
CS 310	Principles of Programming Languages	
Systems Track		
CS 231	Introduction to Computer Organization	
CS 265	C Programming	

CS 350	Computer System Concepts	
Select two of the following courses:		6
CS 321	Introduction to Networking	
CS 324	Database Management	
CS 410	Compiler Construction	
CS 450	Operating Systems Structure	
CS 465	Introduction to Cybersecurity	
CS 472	Artificial Intelligence	
Total Hours		22-23

Department of History, English, and Creative Arts

HISTORY AND GOVERNMENT

MINOR CODE - UT09

Required Courses		
POLS 102	Introduction to American Government	3
Select one of the following sets of courses:		6
HIST 152 & HIST 153	Growth of the American Nation to 1865 and Making of Modern America: 1865 to the Present	
HIST 179 & HIST 180	World History to 1500 and World History Since 1500	
POLS 300+ Level Courses		3
HIST 200+ Level Courses		9
Total Hours		21

PROFESSIONAL WRITING AND EDITING

MINOR CODE - UT23

Minimum 3.0 GPA in PWE courses.

Required Courses		
ENGL 301	Writing Theory and Practice	3
ENGL 302	Editing	3
Select one course from each of the three following groups:		9
Business and Technical Writing		
ENGL 304	Business and Professional Writing	
ENGL 305	Technical Writing	
Writing with Technology		
ENGL 303	Multimedia Writing	
ENGL 306	Topics in Humanities Computing	
Linguistics		
ENGL 221	The English Language	
ENGL 321	History of the English Language	
Total Hours		15

Department of Management

BUSINESS ADMINISTRATION

MINOR CODE - UT03

Required Courses		
ACCT 201	Principles of Accounting	3
ACCT 202	Principles of Accounting	3
BCOR 320	Legal Environment of Business	3
BCOR 350	Principles of Marketing	3

BCOR 370	Managing Individuals and Teams	3
CS 101	Intro to Computer Applications	4
FIN 325	Financial Management 1	3
MANG 386	Business Statistics	3
Total Hours		25

HUMAN RESOURCES ADMINISTRATION

MINOR CODE - UT10

Required Courses		
MANG 330	Human Resource Management Fundamentals	3
MANG 422	The Individual and the Organization	3
Select three of the following:		9
ECON 430	Collective Bargaining	
HRMG 440	Training and Development	
MANG 350	Leadership In Business	
PSYC 350	Topics in Social Psychology	
Total Hours		15

MARKETING

MINOR CODE - UT13

Required Courses		
BCOR 350	Principles of Marketing	3
MKTG 380	Integrated Promotions	3
Select four of the following courses:		12
MKTG 315	Buyer Behavior	
MKTG 325	Marketing Research	
MKTG 410	Retail Management	
MKTG 420	Sales Management	
MKTG 485	Global Marketing	
Total Hours		18

Department of Mathematics

MATHEMATICS

MINOR CODE - UT14

Required Courses		
MATH 155	Calculus 1	4
MATH 156	Calculus 2	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
MATH 441	Applied Linear Algebra	3
Select two of the following courses:		6
MATH 283	Introduction to the Concepts of Mathematics	
MATH 300+ or 400+ Level Courses (excluding MATH 315)		
Total Hours		25

Department of Physical Sciences

CHEMISTRY

MINOR CODE - UT04

A minimum overall GPA of 2.0 is required for this minor.

A minimum grade of D- is required for the courses in this minor.		
Required Courses		
CHEM 115	Fundamentals of Chemistry	4
CHEM 116	Fundamentals of Chemistry	4
CHEM 233 & CHEM 235	Organic Chemistry and Organic Chemistry Laboratory	4
CHEM 234 & CHEM 236	Organic Chemistry and Organic Chemistry Laboratory	4
Select two of the following courses:		8
CHEM 215	Introductory Analytical Chemistry	
CHEM 346 & CHEM 347	Physical Chemistry and Physical Chemistry Laboratory	
CHEM 348 & CHEM 349	Physical Chemistry and Physical Chemistry Laboratory	
Total Hours		24

Department of Psychology

PSYCHOLOGY

MINOR CODE - UT17

A minimum grade of C- is required for all courses in the minor.

Required Courses		
PSYC 101	Introduction to Psychology	3
PSYC 202	Research Methods in Psychology	3
PSYC 301	Biological Foundations of Behavior	3-4
or PSYC 302	Behavior Principles	
Select one of the following courses:		3
PSYC 241	Introduction to Human Development	
PSYC 281	Introduction to Abnormal Psychology	
Select two of the following courses:		6
PSYC 331	History and Systems of Psychology	
PSYC 343	Child and Adolescent Development	
PSYC 351	Topics in Social Psychology	
PSYC 363	Personality Theory	
PSYC 382	Exceptional Children	
PSYC 424	Learning and Behavior Theory	
PSYC 474	Applied Behavior Analysis	
PSYC 491	Professional Field Experience	
PSYC 493	Special Topics	
PSYC 495	Independent Study	
Total Hours		18-19

Department of Social Sciences and Public Administration

CRIMINAL JUSTICE

MINOR CODE - UT21

A 2.0 GPA is required for all courses counted toward the minor.

Required Courses		
CJ 101	Introduction to Criminal Justice	3
CJ 233	Juvenile Justice	3
Select three of the following courses:		9
ACCT 421	Fraud Management: Legal/Ethical Issues	
CJ 310	Law Enforcement Administration	

CJ 320	Courts and Judicial Systems	
CJ 410	Criminal Investigations	
HUMS 320	Public Administration	
POLS 313	American Constitutional Law	
POLS 400	Terrorism and National Security	
SOCA 302	Deviant Behavior	
SOCA 311	Social Research Methods	
Total Hours		15

ECONOMICS

MINOR CODE - UT05

Must have 18 credit hours and 9 hours must be 300 or 400 level courses

Required Courses		
ECON 201	Principles of Microeconomics	3
ECON 202	Principles of Macroeconomics	3
ECON 301	Intermediate Micro-Economic Theory	3
Select three of the following:		9
ECON 225	Elementary Business and Economics Statistics	
ECON 331	Money and Banking	
ECON 401	Managerial Economics	
ECON 430	Collective Bargaining	
ECON 441	Public Economics	
Other ECON courses may be accepted with advisor approval.		
Total Hours		18

POLITICAL SCIENCE

MINOR CODE - UT16

Must have 18 credit hours and 9 hours must be 300 or 400 level courses.

Required Courses		
POLS 102	Introduction to American Government	3
POLS 260	Introduction to International Relations	3
POLS 319	Comparative Government	3
Select three of the following courses:		9
POLS 103	Global Political Issues	
POLS 220	State and Local Government	
POLS 313	American Constitutional Law	
POLS 400	Terrorism and National Security	
HUMS 320	Public Administration	
Advisor Approved POLS and HUMS Courses		
Total Hours		18

SOCIOLOGY

MINOR CODE - UT19

Must have 18 hours of sociology courses and 9 hours must be in 300 or 400 level sociology courses.

A 2.0 GPA is required for all courses counted toward the minor.

Required Courses		
SOCA 101	Introduction to Sociology	3
Sociology (SOCA) Electives		15
(must include at least 9 credit hours of upper division courses)		

WGST 225	Women in Appalachia (may be included as part of the Sociology minor)	
Total Hours		18

Department of Sport Studies

SPORT MANAGEMENT

MINOR CODE - UT20

A minimum grade of C- is required for all courses in this minor.

Required Courses		
BCOR 350	Principles of Marketing	3
BCOR 370	Managing Individuals and Teams	3
SM 425	Sport Facility and Event Management	3
SM 485	Sport Management	3
SM 486	Sport Marketing & Sales	3
Select one of the following:		3
SM 370	Sport Finance and Economics	
SM 380	History and Philosophy of Sport	
Total Hours		18

Major Learning Goals

INTERDISCIPLINARY STUDIES

1. Develop broad knowledge in two or more areas of study.
2. Explain interdisciplinary studies and its value to career goals and the community to others.
3. Collect and evaluate information using the appropriate interdisciplinary perspectives.
4. Compose various academic documents associated with a successful career path, including a research paper, cover letter, and resume.
5. Analyze contemporary issues using an interdisciplinary perspective and academic knowledge.

Interdisciplinary Studies B.A.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

GEF Elective Requirements (1, 2, 3, 4, 5, 6, 7, and 8)		34
SPAN 101	Elementary Spanish 1	3
SPAN 102	Elementary Spanish 2	3
SPAN 203	Intermediate Spanish 1	3
SPAN 204	Intermediate Spanish 2	3
WVUE 191	First Year Seminar	1
MDS 495	Independent Study	4
Academic Discipline 1 Requirements (AD1)		18
Academic Discipline 2 Requirements (AD2)		18
Academic Discipline Restricted Electives		9
MDS 199	Orientation to MDS	2
MDS 389	Interdisciplinary Research Methods	3
MDS 489	Capstone	3
Guided Electives		15
Electives		1
Total Hours		120

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
WVUE 191	1	SPAN 102	3
SPAN 101	3	GEF 4	3
GEF 2	4	GEF 5	3
GEF 3	3	GEF 6	3
Elective	1		
	15		15

Second Year

Fall	Hours	Spring	Hours
SPAN 203	3	SPAN 204	3
AD 1: Discipline 1 Requirement (1 of 6)	3	AD 1: Discipline 1 Requirement (2 of 6)	3
AD 2: Discipline 2 Requirement (1 of 6)	3	AD 2: Discipline 2 Requirement (2 of 6)	3
GEF 8	3	AD: Restricted Elective	3
MDS 199	2	GEF 8	3
	14		15

Third Year

Fall	Hours	Spring	Hours
AD 1: Discipline 1 Requirement (3 of 6)	3	AD 1: Discipline 1 Requirement (4 of 6)	3
AD 2: Discipline 2 Requirement (3 of 6)	3	AD 2: Discipline 2 Requirement (4 of 6)	3
MDS 389	3	AD: Restricted Elective	3
AD: Restricted Elective	3	IA: Guided Elective	3
IA: Guided Elective	3	IA: Guided Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
MDS 495	4	AD 1: Discipline 1 Requirement (6 of 6)	3
AD 1: Discipline 1 Requirement (5 of 6)	3	AD 2: Discipline 2 Requirement (6 of 6)	3
AD 2: Discipline 2 Requirement (5 of 6)	3	MDS 489	3
GEF 7	3	IA: Guided Elective	3

GEF 8	3 IA: Guided Elective	3
	16	15

Total credit hours: 120

Interdisciplinary Studies B.S.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

GEF Elective Requirements (1, 2, 3, 4, 5, 6, 7, and 8)		34
WVUE 191	First Year Seminar	1
MDS 495	Independent Study	4
Academic Discipline 1 Requirements (AD1)		18
Academic Discipline 2 Requirements (AD2)		18
Academic Discipline Restricted Electives		18
Guided Electives		18
MDS 199	Orientation to MDS	2
MDS 389	Interdisciplinary Research Methods	3
MDS 489	Capstone	3
Elective		1
Total Hours		120

Suggested Plan of Study

First Year

Fall	**Hours**	**Spring**	**Hours**
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
WVUE 191	1	AD: Restricted Elective	3
GEF 2	4	GEF 5	3
GEF 3	3	GEF 6	3
GEF 4	3	GEF 8	3
Elective	1		
	15		15

Second Year

Fall	Hours	Spring	Hours
MDS 199	2	AD 1: Discipline 1 Requirement (2 of 6)	3
AD 1: Discipline 1 Requirement (1 of 6)	3	AD 2: Discipline 2 Requirement (2 of 6)	3
AD 2: Discipline 2 Requirement (1 of 6)	3	AD: Restricted Elective	3
AD: Restricted Elective	3	IA: Guided Elective	3
GEF 8	3	GEF 8	3
	14		15

Third Year

Fall	Hours	Spring	Hours
AD 1: Discipline 1 Requirement (3 of 6)	3	AD: Restricted Elective	3
AD 2: Discipline 2 Requirement (3 of 6)	3	AD 1: Discipline 1 Requirement (4 of 6)	3
MDS 389	3	AD 2: Discipline 2 Requirement (4 of 6)	3
IA: Guided Elective	3	IA: Guided Elective	3
GEF 7	3	IA: Guided Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
MDS 495	4	MDS 489	3
AD 1: Discipline 1 Requirement (5 of 6)	3	AD 1: Discipline 1 Requirement (6 of 6)	3
AD 2: Discipline 2 Requirement (5 of 6)	3	AD 2: Discipline 2 Requirement (6 of 6)	3
AD: Restricted Elective	3	AD: Restricted Elective	3
IA: Guided Elective	3	IA: Guided Elective	3
	16		15

Total credit hours: 120

Psychology

Degree Awarded

- Bachelor of Arts

Nature of Program

The Bachelor of Arts degree in Psychology has an emphasis in human behavior and counseling. It is broadly conceived and designed to prepare students for a variety of careers. Among the notable features of the program are a course in research methods with an emphasis in behavior analysis and adjustment in a laboratory setting, a field experience option that allows students to earn credits for placement in a public or private enterprise for professional competence development, and a capstone course that integrates methodology, research, and writing in the discipline. The combination of coursework and field experience will permit students to achieve professional certification necessary to work with special needs children.

Graduates of the program will be prepared to enter careers in applied mental health or organizational settings. Some examples of career options include education, children and youth behavioral services, adult behavioral services, counseling, corrections, health-care related occupations, and other fields. Psychology majors may also pursue advanced degrees in graduate or professional schools.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations

F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4

F4 - Society & Connections	3
F5 - Human Inquiry & the Past	3
F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Restricted Electives selected from: ARHS, BIOL, CHEM, CS, CJ, ECON, HIST, MATH, MUSC, PHYS, POLS, PSYC, SOCA, FRNX, foreign language		
Minimum 2.0 in each of the following: PSYC 101, 202, 242, 301, 302, 350, and STAT 211 or ECON 225		
Minimum 2.0 cumulative average in PSYC courses		
GEF Elective Requirements (5, 6, and 8)		15
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
Select one of the following (GEF 3):		3
MATH 126A	College Algebra 5-Day	
MATH 126B	College Algebra 4-Day	
MATH 126C	College Algebra 3-Day	
ECON 225	Elementary Business and Economics Statistics	3
or STAT 211	Elementary Statistical Inference	
BIOL 111	General Biology (GEF 2)	4
BIOL 112	General Biology	4
CSAD 270	Effective Public Speaking	3
PSYC 101	Introduction to Psychology (GEF 4)	3
PSYC 201	Psychology as a Profession	1
PSYC 202	Research Methods in Psychology	3
PSYC 241	Introduction to Human Development	3
PSYC 281	Introduction to Abnormal Psychology	3
PSYC 301	Biological Foundations of Behavior	3
PSYC 302	Behavior Principles	4
PSYC 350	Topics in Social Psychology	3
PSYC 362	Psychological Assessment	3
PSYC 363	Personality Theory	3
PSYC 382	Exceptional Children	3
PSYC 401	Psychology Capstone Experience	1
PSYC 424	Learning and Behavior Theory	3
PSYC 474	Applied Behavior Analysis	3
Select one of the following:		3
PSYC 491	Professional Field Experience	
PSYC 493	Special Topics	
PSYC 495	Independent Study	
WVUE 191	First Year Seminar	1
Foreign Language (GEF 7)		12
Restricted Electives (a minimum of 12 credit hours must be 300 or 400 level)		24
Total Hours		120

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
Select one of the following (GEF 3):	3	ECON 225 or STAT 211	3
MATH 126A		PSYC 201	1
MATH 126B		PSYC 241	3
MATH 126C		Foreign Language	3
PSYC 101 (GEF 4)	3	GEF 6	3
WVUE 191	1		
Foreign Language (GEF 7)	3		
GEF 5	3		
	16		16

Second Year

Fall	Hours	Spring	Hours
BIOL 111 (GEF 2)	4	BIOL 112	4
PSYC 202	3	ENGL 305	3
PSYC 281	3	PSYC 301	3
PSYC 363	3	PSYC 350	3
Foreign Language	3	Foreign Language	3
	16		16

Third Year

Fall	Hours	Spring	Hours
CSAD 270	3	PSYC 382	3
PSYC 302	4	PSYC 474	3
PSYC 362	3	Restricted Elective	3
GEF 8	3	GEF 8	3
GEF 8	3		
	16		12

Fourth Year

Fall	Hours	Spring	Hours
PSYC 424	3	PSYC 401	1
Select one of the following:	3	Restricted Electives	12
PSYC 491			
PSYC 493			
PSYC 495			
Restricted Electives	9		
	15		13

Total credit hours: 120

Major Learning Goals

PSYCHOLOGY

Students completing the program will:

- Use the scientific approach to solve psychologically-relevant problems and to increase the knowledge base of psychology
- Demonstrate the diverse set of variables that influence behavior
- Demonstrate critical and ethical thinking skills
- Demonstrate grounding in the field of behavioral analysis
- Demonstrate an appreciation of the specialized psychological needs in Appalachia
- Demonstrate effective communication skills.

Department of Psychology Minor

PSYCHOLOGY

MINOR CODE - UT17

A minimum grade of C- is required for all courses in the minor.

Required Courses		
PSYC 101	Introduction to Psychology	3
PSYC 202	Research Methods in Psychology	3
PSYC 301	Biological Foundations of Behavior	3-4
or PSYC 302	Behavior Principles	
Select one of the following courses:		3
PSYC 241	Introduction to Human Development	
PSYC 281	Introduction to Abnormal Psychology	
Select two of the following courses:		6
PSYC 331	History and Systems of Psychology	
PSYC 343	Child and Adolescent Development	
PSYC 351	Topics in Social Psychology	
PSYC 363	Personality Theory	
PSYC 382	Exceptional Children	
PSYC 424	Learning and Behavior Theory	
PSYC 474	Applied Behavior Analysis	
PSYC 491	Professional Field Experience	
PSYC 493	Special Topics	
PSYC 495	Independent Study	
Total Hours		18-19

Public Service Administration

Degree Awarded

- Bachelor of Science

Nature of Program

The Public Service Administration (PSA) major was revised in 2014 as an interdisciplinary 120 credit hour program that enables students to complete the degree, including the internship, in a timely manner. There is a built in practicum internship that gives the students job experience and allows them to apply the skills they have obtained during the course of their studies. This degree prepares students for careers with all levels of government: local, county, state and federal. PSA also prepares students for a career in non - profit organizations. It is a perfect pre-law degree as it provides a number of Political Science courses. In addition, this degree is perfect for continuing on to graduate school in social work, public administration, political science, sociology, or business administration. Provided the correct restrictive electives are chosen, a student can obtain a minor in Political Science, Sociology or Economics without additional course work.

FACULTY

CHAIR

- Dr. Janis E. Rezek - PhD Sociology
  Gender studies emphasis

ASSISTANT PROFESSOR

- Dr. Andrea Kay Kent - PhD Political Science

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations

F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

GEF Elective Requirements (2B, 5, 6, and 8)		19
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
MATH 123	Finite Mathematics 1 (GEF 3)	3
CS 101	Intro to Computer Applications	4
POLS 102	Introduction to American Government	3
POLS 220	State and Local Government	3
POLS 260	Introduction to International Relations (GEF 7)	3
POLS 313	American Constitutional Law	3
POLS 480	Seminar in Non-Profit Administration	3
PSYC 101	Introduction to Psychology (GEF 4)	3
SOCA 101	Introduction to Sociology	3
SOCA 207	Social Problems in Contemporary America	3
or SOCA 235	Race and Ethnic Relations	
SOCA 305	Social Stratification Social and Power in American Society	3
SOCA 311	Social Research Methods	3
SOCA 333	Sociology of Work and Work Places	3
BCOR 370	Managing Individuals and Teams	3
ECON 201	Principles of Microeconomics	3
ECON 202	Principles of Macroeconomics	3
ECON 225	Elementary Business and Economics Statistics	3
or STAT 211	Elementary Statistical Inference	
ECON 441	Public Economics	3
HUMS 210	Introduction to Welfare	3
HUMS 320	Public Administration	3
HUMS 480	Grant Writing and Documentation	3
HUMS 489	Practicum Capstone Internship	6
MANG 422	The Individual and the Organization	3
WVUE 191	First Year Seminar	1
Restricted Electives (at least 3 hours must be 300 or 400 level)		15
Electives		3
Total Hours		120

Restricted Electives

ACCT 201	Principles of Accounting	3

ACCT 202	Principles of Accounting	3
ACCT 311	Intermediate Accounting	3
ACCT 312	Intermediate Accounting	3
ACCT 461	Accounting for Nonbusiness Entities	3
BCOR 320	Legal Environment of Business	3
BCOR 330	Information Systems and Technology	3
CSAD 270	Effective Public Speaking	3
CJ 101	Introduction to Criminal Justice	3
CJ 310	Law Enforcement Administration	3
CJ 320	Courts and Judicial Systems	3
ECON 301	Intermediate Micro-Economic Theory	3
ECON 331	Money and Banking	3
HIST 153	Making of Modern America: 1865 to the Present	3
HIST 261	Recent America: The United States since 1918	3
HIST 464	American Foreign Relations 1941 to Present	3
HUMS 100	Community Service	1-3
MANG 330	Human Resource Management Fundamentals	3
MANG 350	Leadership In Business	3
MILS 301	Military Science	3
MILS 302	Military Science	3
MILS 401	Military Science	3
MILS 402	Military Science	3
PHIL 170	Introduction to Critical Reasoning	3
POLS 103	Global Political Issues	3
POLS 319	Comparative Government	3
POLS 400	Terrorism and National Security	3
SOCA 105	Introduction to Anthropology	3
SOCA 221	Families and Society	3
SOCA 302	Deviant Behavior	3
SOCA 327	Appalachian Culture	3
SOCA 360	Women and Men in Society	3
SOCA 430	World Religions	3
SPAN 101	Elementary Spanish 1	3
SPAN 102	Elementary Spanish 2	3
SPAN 203	Intermediate Spanish 1	3
SPAN 204	Intermediate Spanish 2	3
WGST 225	Women in Appalachia	3

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
MATH 123 (GEF 3)	3	CS 101	4
WVUE 191	1	SOCA 101	3
Elective	3	Restricted Elective	3
GEF 2B	4	GEF 8	3
	14		16

Second Year

Fall	Hours	Spring	Hours
BCOR 370	3	ECON 202	3
ECON 201	3	ENGL 305	3
POLS 102	3	HUMS 210	3

PSYC 101 (GEF 4)	3	POLS 220	3
GEF 8	3	POLS 260 (GEF 7)	3
		SOCA 333	3
	15		18

Third Year

Fall	**Hours**	**Spring**	**Hours**
ECON 441	3	ECON 225 or STAT 211	3
HUMS 320	3	SOCA 207 or 235	3
HUMS 480	3	Restricted Elective	3
SOCA 305	3	GEF 6	3
GEF 5	3	GEF 8	3
	15		15

Fourth Year

Fall	**Hours**	**Spring**	**Hours**
MANG 422	3	POLS 480	3
POLS 313	3	HUMS 489	6
SOCA 311	3	Restricted Elective (300 or 400 level)	3
Restricted Electives	6		
	15		12

Total credit hours: 120

Major Learning Goals

PUBLIC SERVICE ADMINISTRATION

- The student will demonstrate leadership skills through written and oral communications, both in person and through computer technology.
- The student will be able to evaluate policy, use critical thinking skills, and be able to make some predictions concerning how these policies will impact their individual and collective situations.
- The student will know the process of managing an organization or government agency program, including understanding the fiscal responsibilities.
- The student will become culturally competent and know the importance of diversity in the work environment.

Department of Social Sciences & Public Administration Minors

CRIMINAL JUSTICE

MINOR CODE - UT21

A 2.0 GPA is required for all courses counted toward the minor.

Required Courses		
CJ 101	Introduction to Criminal Justice	3
CJ 233	Juvenile Justice	3
Select three of the following courses:		9
ACCT 421	Fraud Management: Legal/Ethical Issues	
CJ 310	Law Enforcement Administration	
CJ 320	Courts and Judicial Systems	
CJ 410	Criminal Investigations	
HUMS 320	Public Administration	
POLS 313	American Constitutional Law	
POLS 400	Terrorism and National Security	
SOCA 302	Deviant Behavior	
SOCA 311	Social Research Methods	
Total Hours		15

ECONOMICS

MINOR CODE - UT05

Must have 18 credit hours and 9 hours must be 300 or 400 level courses

Required Courses		
ECON 201	Principles of Microeconomics	3
ECON 202	Principles of Macroeconomics	3
ECON 301	Intermediate Micro-Economic Theory	3
Select three of the following:		9
ECON 225	Elementary Business and Economics Statistics	
ECON 331	Money and Banking	
ECON 401	Managerial Economics	
ECON 430	Collective Bargaining	
ECON 441	Public Economics	
Other ECON courses may be accepted with advisor approval.		
Total Hours		18

POLITICAL SCIENCE

MINOR CODE - UT16

Must have 18 credit hours and 9 hours must be 300 or 400 level courses.

Required Courses		
POLS 102	Introduction to American Government	3
POLS 260	Introduction to International Relations	3
POLS 319	Comparative Government	3
Select three of the following courses:		9
POLS 103	Global Political Issues	
POLS 220	State and Local Government	
POLS 313	American Constitutional Law	
POLS 400	Terrorism and National Security	
HUMS 320	Public Administration	
Advisor Approved POLS and HUMS Courses		
Total Hours		18

SOCIOLOGY

MINOR CODE - UT19

Must have 18 hours of sociology courses and 9 hours must be in 300 or 400 level sociology courses.

A 2.0 GPA is required for all courses counted toward the minor.

Required Courses		
SOCA 101	Introduction to Sociology	3
Sociology (SOCA) Electives		15
(must include at least 9 credit hours of upper division courses)		
WGST 225	Women in Appalachia (may be included as part of the Sociology minor)	
Total Hours		18

Regents Bachelor of Arts

Degree Awarded

- Regents Bachelor of Arts

Nature of Program

WVU Tech participates in the state-wide Regents Bachelor of Arts degree program. The program is designed for adults who wish to complete their college studies and offers an opportunity to gain credits for work and life experience. Students tailor their academic courses of study to meet their individual needs.

Areas of Emphasis

WVU Tech encourages adult student in the Regents B.A. program to complete a focused area of education. The following areas of emphasis require the completion of 15 graded hours of upper-division classroom work with a grade of C- or better in each course.

- Aviation Studies - (AVIA 489 Aviation Law, 12 hours of Aviation Management (AVIA)
- Business - Accounting (ACCT), Finance (FIN), Management (MANG), Marketing (MKTG), Information Systems (ISYS)
- Creative Arts - English (ENGL), Music (MUSC), Theatre (THET), Languages
- Cultural Studies - Sociology (SOCA), History (HIST), Music (MUSC), Psychology (PSYC), English (ENGL)
- Government - Economics (ECON), History (HIST), Sociology (SOCA), Political Science (POLS)
- Health Care Services - HUMS 320 Public Administration and HUMS 330 Intro to Health Care Organizations, 9 hours from Human Services (HUMS), SOCA 325 Illness/Health Care, and/or SOCA 312 Death and Dying
- Information Studies - Information Systems (ISYS), Management (MANG), English (ENGL)
- Marketing - BCOR 350 Principles of Marketing, 12 hours of Marketing (MKTG)
- Organizational Management - BCOR 370 Managing Individuals and Teams, MANG 422 The individual and the Organization, 9 hours from Business core (BCOR) and/or Management (MANG) courses
- Sciences - Mathematics (MATH), Physics (PHYS), Biology (BIOL), Chemistry (CHEM)
- Social Sciences - Economics (ECON), History (HIST), Sociology (SOCA), Political Science (POLS)
- Sport Studies - Athletic career Education (ACE), Sport Management (SM). At least two courses each from ACE and SM.

For information, contact:

Frank D. Robbins, Program Coordinator
West Virginia University Institute of Technology
Learning Resource Center
Beckley, WV 25801
Telephone: (304) 929-1215

Frank.Robbins@mail.wvu.edu

http://rba.wvutech.edu

Admissions

Admission and retention requirements are the same as for other degree programs except that students are not eligible for admission until at least four years after graduation from high school.

Students may not be enrolled simultaneously in the Regents degree program and another college degree program and they are ineligible if they have already earned a bachelor's degree.

All passing grades from other accredited colleges, plus passing grades on CLEP and other college level tests, will be accepted.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3

F5 - Human Inquiry & the Past	3
F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

WVU Tech GPA: Minimum 2.0 required.	
Overall GPA: Minimum 2.0 required.	
General Education	
Communication Skills	6
Select courses fulfilling GEF 1 or courses fulfilling this outcome and approved by an advisor.	
Humanities	6
Select courses fulfilling GEF 4 or 6, or courses fulfilling this outcome and approved by an advisor.	
Social Science	6
Select courses fulfilling GEF 5 or 7, or courses fulfilling this outcome and approved by an advisor.	
Natural Sciences	6
Select courses fulfilling GEF 2, or courses fulfilling this outcome and approved by an advisor.	
Mathematics or Computer Applications	3
Select courses fulfilling GEF 3, or courses fulfilling this outcome and approved by an advisor.	
Upper Division	39
Additional Hours: Area of Emphasis and/or Electives (to reach 120 minimum hours)	54
Total Hours	120

AREAS OF EMPHASIS OFFERED

- Business (p. 102)
- Creative Arts (p. 102)
- Cultural Studies (p. 102)
- Government (p. 103)
- Health Care Services (p. 103)
- Information Studies (p. 103)
- Marketing (p. 103)
- Organizational Management (p. 103)
- Sciences (p. 103)
- Social Sciences (p. 103)

BUSINESS AREA OF EMPHASIS

Must have a C- grade or better in all AOE designated courses

300 or 400 level courses in the following subject areas: ACCT, ENTR, FIN, MANG, MKTG, ISYS	15
Total Hours	15

CREATIVE ARTS AREA OF EMPHASIS

Must earn a C- grade or better in all designated AOE courses

300 or 400 level courses in the following subject areas: ENGL, MUSC, THET, and Languages	15
Total Hours	15

CULTURAL STUDIES AREA OF EMPHASIS

Must have a C- grade or better in all AOE designated courses

300 or 400 level courses in the following subject areas: ENGL, HIST, PSYC, SOCA		15
Total Hours		15

GOVERNMENT AREA OF EMPHASIS

Must earn a C- grade or better in all designated AOE courses

300 or 400 level courses in the following subject areas: ECON, HIST, POLS, SOCA		15
Total Hours		15

HEALTH CARE SERVICES AREA OF EMPHASIS

Must earn a C- grade or better in all designated AOE courses

HUMS 320	Public Administration	3
HUMS 330	Health Insurance	3
Select three of the following:		9
300 or 400 level courses in the following subject areas: HUMS		
SOCA 312	Death and Dying	
SOCA 325	Illness and Health Care	
Total Hours		15

INFORMATION STUDIES AREA OF EMPHASIS

Must have a C- grade or better in all AOE designated courses

300 or 400 level courses in the following subject areas: ENGL, ISYS, MANG		15
Total Hours		15

MARKETING AREA OF EMPHASIS

Must earn a C- grade or better in all designated AOE courses

BCOR 350	Principles of Marketing	3
300 or 400 level courses in the following subject areas: MKTG		12
Total Hours		15

ORGANIZATIONAL MANAGEMENT AREA OF EMPHASIS

Must earn a C- grade or better in all designated AOE courses

BCOR 370	Managing Individuals and Teams	3
MANG 422	The Individual and the Organization	3
300 or 400 level courses in the following subject areas: BCOR, MANG		9
Total Hours		15

SCIENCES AREA OF EMPHASIS

Must earn a C- grade or better in all designated AOE courses

300 or 400 level courses in the following subject areas: BIOL, CHEM, MATH, PHYS		15
Total Hours		15

SOCIAL SCIENCES AREA OF EMPHASIS

Must earn a C- grade or better in all designated AOE courses

300 or 400 level courses in the following subject areas: ECON, HIST, POLS, PSYC, SOCA		15
Total Hours		15

Major Learning Goals

REGENTS BACHELOR OF ARTS

- Consistent with what society expects of all adult workers and good citizens, the Regents graduate will be able to demonstrate a general education in communications, the humanities, social sciences, natural sciences, and mathematics/computer applications.
- The Regents graduate will be able to demonstrate a focused knowledge of one or more academic areas of his or her own choosing.

Sport Management

Degree Awarded

- Bachelor of Science

Nature of Program

WVU Tech offers a Bachelor of Science degree in Physical Education (BSPED) with majors in Athletic Coaching Education (ACE) and in Sport Management (SM) in the College of Business, Humanities and Social Sciences (BHSS). The SM major prepares graduates for careers in professional and collegiate sport organizations, fitness and recreational facilities, and sport-related businesses. Examples of career opportunities include directors of marketing and promotions, assistant general managers, athletic directors, vice presidents of operations, compliance directors, and other positions. In prior academic years the BSPED degree offered on the WVU Tech campus was conferred by the WVU College of Physical Activity and Sport Sciences (CPASS). Students declaring the SM major in Spring 2018 semester or a later semester will have BSPED degrees earned on the WVU Tech Beckley Campus conferred by WVU Tech – BHSS. Students declaring the SM major in the Fall 2017 semester, and students enrolled in the SM major in an earlier semester, may elect to have their diplomas reflect either WVU Tech – BHSS or WVU – CPASS as the college conferring the degree.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Minimum 2.0 in all major courses (except SM 167)		
Minimum 2.5 cumulative average for graduation		
GEF Elective Requirements (2, 5, 6, and 8)		16
WVUE 191	First Year Seminar	1
Pre-Major Requirements		
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
COMM 100	Principles of Human Communication	1
COMM 102	Human Communication in the Interpersonal Context	2
ECON 201	Principles of Microeconomics	3

JRL 101	Media and Society	3
Select one of the following (GEF 3):		3
MATH 121	Intro Concepts Of Mathematics	
MATH 126A	College Algebra 5-Day	
MATH 126B	College Algebra 4-Day	
SM 167	Introduction to Sport Management (minimum grade of C-)	3
Applied Area Requirements		
SEP 271	Sport in American Society (GEF 8)	3
SEP 272	Psychological Perspectives of Sport (GEF 4)	3
CSAD 270	Effective Public Speaking	3
SM 340	Sport Governance	3
SM 345	Technology in Sport Management	2
SM 350	Leadership in Sport Management	2
SM 355	Orientation in Sport Management	1
SM 370	Sport Finance and Economics	3
SM 375	Sport in the Global Market (GEF 7)	3
SM 380	History and Philosophy of Sport	3
SM 387	Issues in Sport Studies	3
SM 425	Sport Facility and Event Management	3
SM 426	Liability in Sport	3
SM 485	Sport Management	3
SM 486	Sport Marketing & Sales	3
SM 491	Professional Field Experience	3
ACCT 201	Principles of Accounting	3
CS 101	Intro to Computer Applications	4
CSAD 270	Effective Public Speaking	3
BCOR 350	Principles of Marketing	3
BCOR 370	Managing Individuals and Teams	3
HUMS 320	Public Administration	3
Select two of the following:		6
ACE 256	Principles and Problems of Coaching	
ECON 202	Principles of Macroeconomics	
MANG 330	Human Resource Management Fundamentals	
MKTG 315	Buyer Behavior	
SM 275	The Olympic Games	
Electives		13
Total Hours		120

Suggested Plan of Study

First Year

Fall	**Hours**	**Spring**	**Hours**
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
SM 167	3	COMM 100	1
WVUE 191	1	COMM 102	2
Elective	1	CS 101	4
GEF 2	4	GEF 5	3
GEF 3 (MATH 121 or higher)	3	GEF 6	3
	15		16

Second Year

Fall	**Hours**	**Spring**	**Hours**
ACCT 201	3	JRL 101	3
CSAD 270	3	SEP 272 (GEF 4)	3

ECON 201	3 Advisor Approved Elective	3
SEP 271 (GEF 8)	3 Advisor Approved Elective	3
SM 375 (GEF 7)	3 GEF 8	3
	15	15

Third Year

Fall	Hours	Spring	Hours
BCOR 350	3	SM 345	2
BCOR 370	3	SM 350	2
HUMS 320	3	SM 355	1
SM 340	3	SM 380	3
SM 370	3	GEF 8	3
		Elective	3
	15		14

Fourth Year

Fall	Hours	Spring	Hours
SM 425	3	ACE 491	3
SM 426	3	SM 486	3
SM 485	3	SM 387	3
Elective	3	Elective	3
Elective	3	Elective	3
	15		15

Total credit hours: 120

Major Learning Goals

SPORT MANAGEMENT

Graduates of Sport Management will:

- Recognize the importance and significance of the role of sport management
- Develop analytical and communication skills appropriate to the professional and corporate environment
- Be prepared to assume management positions in a variety of athletic and sport-related businesses and industries
- Be familiar with compliance programs at the collegiate and national athletic sport levels
- Recognize the importance of continuing emotional, intellectual, and physical development throughout their lives

Department of Sport Studies Minors

SPORT MANAGEMENT

MINOR CODE - UT20

A minimum grade of C- is required for all courses in this minor.

Required Courses		
BCOR 350	Principles of Marketing	3
BCOR 370	Managing Individuals and Teams	3
SM 425	Sport Facility and Event Management	3
SM 485	Sport Management	3
SM 486	Sport Marketing & Sales	3
Select one of the following:		3
SM 370	Sport Finance and Economics	
SM 380	History and Philosophy of Sport	
Total Hours		18

Leonard C. Nelson College of Engineering and Sciences

General Information

The mission of the Leonard C. Nelson College of Engineering and Sciences of the West Virginia University Institute of Technology closely reflects the mission of the Institution. The programs in the College of Engineering and Sciences address the professional engineering and science needs of industry, government, and business and prepare their graduate to be citizens of the state, national, and global communities. The programs provide for a student-centered education that balances career preparation with an understanding and appreciation of the traditional humanities and sciences. The programs strive to prepare tomorrow's engineers and scientists with a broad education necessary to effectively communicate technical concepts to a wide audience and to place technical solutions in a societal context. In addition, the College of Engineering and Sciences gives qualified students the opportunity to gain valuable experience practicing the fundamentals of engineering and science through the Co-Op program, as well as through the placement of students in intern positions.

Department of Biology

BIOLOGY

MINOR CODE - UT02

Required Courses		
BIOL 111	General Biology	4
BIOL 112	General Biology	4
BIOL Electives (must include at least 9 credit hours of upper division courses)		16
Total Hours		24

Department of Computer Science and Information Systems

COMPUTER SCIENCE

MINOR CODE - UT24

Student must earn a grade of C or better for each of the courses counted towards the minor.

Required Courses		
CS 121	Computer Science 1	4
CS 122	Computer Science 2	4
Complete the requirements for one of the following tracks:		8-9
Programming Track		
CS 201	Data Structures	
CS 222	Intro Software Engineering	
CS 310	Principles of Programming Languages	
Systems Track		
CS 231	Introduction to Computer Organization	
CS 265	C Programming	
CS 350	Computer System Concepts	
Select two of the following courses:		6
CS 321	Introduction to Networking	
CS 324	Database Management	
CS 410	Compiler Construction	
CS 450	Operating Systems Structure	
CS 465	Introduction to Cybersecurity	
CS 472	Artificial Intelligence	
Total Hours		22-23

Department of Mathematics

MATHEMATICS

MINOR CODE - UT14

Required Courses		
MATH 155	Calculus 1	4
MATH 156	Calculus 2	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
MATH 441	Applied Linear Algebra	3
Select two of the following courses:		6
MATH 283	Introduction to the Concepts of Mathematics	
MATH 300+ or 400+ Level Courses (excluding MATH 315)		
Total Hours		25

Department of Physical Sciences

CHEMISTRY

MINOR CODE - UT04

A minimum overall GPA of 2.0 is required for this minor.

A minimum grade of D- is required for the courses in this minor.

Required Courses		
CHEM 115	Fundamentals of Chemistry	4
CHEM 116	Fundamentals of Chemistry	4
CHEM 233 & CHEM 235	Organic Chemistry and Organic Chemistry Laboratory	4
CHEM 234 & CHEM 236	Organic Chemistry and Organic Chemistry Laboratory	4
Select two of the following courses:		8
CHEM 215	Introductory Analytical Chemistry	
CHEM 346 & CHEM 347	Physical Chemistry and Physical Chemistry Laboratory	
CHEM 348 & CHEM 349	Physical Chemistry and Physical Chemistry Laboratory	
Total Hours		24

Aerospace Engineering

Degree Awarded

- Bachelor of Science in Aerospace Engineering

Nature of Program

West Virginia University Institute of Technology (WVU Tech) and West Virginia University (WVU) have joined their resources to offer a 2+2 aerospace program, (two years at Montgomery and two years at Morgantown), leading to a Bachelor of Science in Aerospace Engineering degree. Under this arrangement, a student interested in a BSAE degree from WVU, can start as a freshman at WVU Tech in Mechanical Engineering, complete the appropriate courses in four semesters with a GPA of at least 2.0 at Montgomery and transfer to the Mechanical and Aerospace Engineering (MAE) Department at Morgantown. Upon completion of the appropriate curriculum requirements during the following four semesters at Morgantown, he/she will receive a BSAE degree from WVU.

Air travel has fascinated humans for a long time. Recent technical advances in aerospace travel, space exploration, and flight of manned and unmanned vehicles have been phenomenal and continue to gain in significance. Aerospace engineering deals with the science and technology of airborne and space vehicles such as airplanes, rockets, missiles and spacecraft. Aerospace technology has also been successfully adopted to improve the performance of many earth-bound vehicles such as hydrofoil ships, high-speed trains and automobiles.

The Aerospace Engineering program at WVU is designed to prepare the student for a career in the aerospace industry or in government research and development centers and laboratories, as well as in military mission-oriented agencies. The undergraduate curriculum also allows the student to prepare for graduate studies in aerospace engineering and in other engineering, as well as non-engineering fields.

The Aerospace curriculum includes studies in the disciplines encountered in the design of aerospace vehicles, missiles, rockets and spacecraft. The undergraduate curriculum includes extensive study of the basic principles of fluid dynamics, solid mechanics and structures, stability and control, thermal sciences and propulsion.

The student is involved in both theoretical and experimental studies, and is trained to integrate basic knowledge of physical and engineering sciences with practical engineering design. With the breadth and depth of education in aerospace engineering, the student becomes a versatile engineer, competent to work in many areas. The curriculum may serve as a terminal program by incorporating design oriented courses for technical electives, or it may be used as a preparatory program for advanced study by the selection of science oriented courses.

Students can also simultaneously pursue B.S. degrees in both aerospace engineering and mechanical engineering by completing additional courses. Information on this 155 credit hour option can be obtained from the Mechanical/Aerospace Engineering Department at WVU.

The student should refer to the University catalog and relevant WVU publications for additional information on the graduation requirements.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

A minimum 2.0 GPA is required in all MAE courses.		
WVUE 191	First Year Seminar	1
GEF Elective Requirements (5, 6 and 7)		9
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
MATH 155	Calculus 1 (GEF 3; Minimum grade of C-)	4
MATH 156	Calculus 2 (GEF 8; Minimum grade of C-)	4
MATH 251	Multivariable Calculus (Minimum grade of C-)	4
MATH 261	Elementary Differential Equations (Minimum grade of C-)	4
ENGR 111	Software Tools for Engineers	3
PHYS 111	General Physics (GEF 2; Minimum grade of C-)	4
PHYS 112	General Physics	4
DRET 120	Drafting 1	2
CHEM 115	Fundamentals of Chemistry (GEF 8)	4
ECON 201	Principles of Microeconomics (GEF 4)	3
ECON 202	Principles of Macroeconomics (GEF 8)	3

MAE 241	Statics	3
MAE 242	Dynamics	3
MAE 243	Mechanics of Materials	3
MAE 320	Thermodynamics	3
EE 221 & EE 222	Introduction to Electrical Engineering and Introduction to Electrical Engineering Laboratory	4
MAE 215	Intro to Aerospace Engineering	3
MAE 244	Dynamics and Strength Laboratory	1
MAE 316	Analysis-Engineering Systems	3
MAE 331	Fluid Mechanics	3
MAE 335	Incompressible Aerodynamics	3
MAE 336	Compressible Aerodynamics	3
MAE 343	Intermediate Mechanics of Materials	3
MAE 345	Aerospace Structures	3
MAE 365	Flight Dynamics	3
MAE 423	Heat Transfer	3
MAE 426	Flight Vehicle Propulsion	3
MAE 434	Experimental Aerodynamics	2
MAE 456	Computer-Aided Design and Finite Element Analysis	3
MAE 460	Automatic Controls	3
MAE 475	Flight Vehicle Design-Capstone	3
MAE 476	Space Flight and Systems	3
Technical Electives		6
Total Hours		122

Suggested Plan of Study

First Year

Fall	**Hours**	**Spring**	**Hours**
Beckley		Beckley	
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
CHEM 115 (GEF 8)	4	ENGR 111	3
DRET 120	2	MAE 241	3
WVUE 191	1	GEF 5	3
	14		16

Second Year

Fall	**Hours**	**Spring**	**Hours**
Beckley		Beckley	
MATH 251	4	ECON 201 (GEF 4)	3
PHYS 111 (GEF 2)	4	MATH 261	4
MAE 242	3	PHYS 112 (GEF 2)	4
MAE 243	3	MAE 320	3
GEF 6	3	MAE 331	3
	17		17

Third Year

Fall	**Hours**	**Spring**	**Hours**
Morgantown		Morgantown	
ECON 202 (GEF 8)	3	MAE 244	1
MAE 215	3	MAE 336	3
MAE 316	3	MAE 345	3
MAE 336	3	MAE 365	3

MAE 343	3	EE 221 & EE 222	4
	15		14

Fourth Year

Fall	**Hours**	**Spring**	**Hours**
Morgantown		Morgantown	
MAE 426	3	MAE 423	3
MAE 434	2	MAE 460	3
MAE 456	3	MAE 475	3
MAE 476	3	Technical Elective	3
Technical Elective	3	GEF 7	3
	14		15

Total credit hours: 122

Biology

Degree Awarded

- Bachelor of Science

Nature of Program

The Biology Program covers all aspects of the organism, from molecular and biochemical pathways through anatomy and physiology of organisms to the structure of populations, communities, landscapes and ecosystems. The program provides grounding in mathematics and other natural science disciplines necessary for the understanding of the organism, such as chemistry, organic chemistry and physics. By careful choice of biology and restricted electives, students can tailor their educational experience to prepare for professional school, graduate school or entry into the workforce upon graduation.

The program provides the student with the opportunity to select additional courses from the disciplines of biology, chemistry, physics, math, computer science, business, foreign language, psychology, health sciences, engineering or other disciplines which might be helpful in biologically oriented careers. In addition to traditional coursework, students also have the opportunity to engage in research projects selected from a variety of biological disciplines. (Students who select electives in any science or technical areas may need additional courses to meet prerequisites.) The restricted electives must be approved by the assigned biology advisor. For students who have reached a more advanced level in mathematics upon graduation from high school and meet ACT score requirements, Calculus I and II may be substituted for College Algebra and Trigonometry. Biology majors must earn a “C” or better in the freshman biology courses to enter upper division BIOL courses. During the last semester of the program, students must take the exit exam in biology. Students are also expected to complete a program of volunteer work to fulfill the college requirement for citizenship.

Program Objectives

Upon graduation, students will be prepared to:

- Pursue advanced degrees in biology and related fields or professional degrees, including medicine, dentistry, veterinary medicine, pharmacy and other health related fields.
- Directly enter a broad range of career pathways in industry and federal or state governments which require a baccalaureate degree in science.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations

F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3

F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

CURRICULUM REQUIREMENTS

GEF Requirements		12
A minimum GPA of 2.0 is required in all BIOL, CHEM, PHYS, MATH, STAT, and PSYC courses.		
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
Select one of the following (GEF 3):		3
MATH 126A	College Algebra 5-Day	
MATH 126B	College Algebra 4-Day	
MATH 126C	College Algebra 3-Day	
MATH 128	Plane Trigonometry	3
CHEM 115	Fundamentals of Chemistry (GEF 2)	4
CHEM 116	Fundamentals of Chemistry (GEF 8)	4
CHEM 233 & CHEM 235	Organic Chemistry and Organic Chemistry Laboratory	4
CHEM 234 & CHEM 236	Organic Chemistry and Organic Chemistry Laboratory	4
PHYS 101	Introductory Physics	4
PHYS 102	Introductory Physics	4
STAT 211	Elementary Statistical Inference	3
BIOL 111	General Biology (GEF 8)	4
BIOL 112	General Biology (GEF 8)	4
BIOL 225	Biology Methods	3
BIOL 240	Microbiology	4
BIOL 303	Genetics	4
BIOL 416	Cell Biology	4
BIOL 461	Principles of Evolution	3
BIOL 466	Ecology	4
BIOL 494	Seminar	2
WVUE 191	First Year Seminar	1
Biology Electives		8
BIOL 336	Vertebrate Embryology	
BIOL 343	Systematic Zoology	
BIOL 347	Parasitology	
BIOL 354	Organismal Botany	
BIOL 417	Biotechnology	
BIOL 440	Comparative Anatomy	
BIOL 452	Plant Taxonomy	
Botany Electives		4
BIOL 354	Organismal Botany	
BIOL 452	Plant Taxonomy	
Zoology Electives		4
BIOL 336	Vertebrate Embryology	
BIOL 343	Systematic Zoology	
BIOL 347	Parasitology	

BIOL 440	Comparative Anatomy	
Restricted Electives *		11
Electives		6
Exit Examination		
Community Service		
Total Hours		120

* Restricted electives are chosen from a list approved by the Biology Department. Please see your advisor for details.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
BIOL 111 (GEF 8)	4	BIOL 112 (GEF 8)	4
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
WVUE 191	1	MATH 128	3
Select one of the following (GEF 3):	3	GEF 5	3
MATH 126A		GEF 6	3
MATH 126B			
MATH 126C			
GEF 4	3		
	14		16

Second Year

Fall	Hours	Spring	Hours
BIOL 225	3	BIOL 240	4
CHEM 115 (GEF 2)	4	CHEM 116 (GEF 8)	4
PHYS 101	4	PHYS 102	4
STAT 211	3	ENGL 305	3
GEF 7	3		
	17		15

Third Year

Fall	Hours	Spring	Hours
CHEM 233 & CHEM 235	4	BIOL 303	4
Botany Elective	4	BIOL 461	3
Zoology Elective	4	CHEM 234 & CHEM 236	4
Elective	3	Restricted Elective	4
	15		15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 416	4	BIOL 466	4
BIOL 494	2	Biology Elective	4
Biology Elective	4	Restricted Elective	3
Restricted Elective	4	Electives	3
	14		14

Total credit hours: 120

Major Learning Outcomes

BIOLOGY

Upon graduation, students of the biology program will be able to:

- Apply scientific method to solving problems.
  a. Formulate a hypothesis and alternate hypotheses.

   b. Design experiments to test hypotheses.
   c. Collect data.
   d. Analyze data statistically and graphically.
   e. Interpret and report data.
- Communicate effectively in writing and orally.
- Evaluate sources of information through a scientific lens.
   a. Perform search of primary scientific literature.
   b. Interpret scientific papers.
   c. Summarize research results from primary sources.
   d. Synthesize information from a variety of sources into a coherent argument.
- Develop a working vocabulary in evolution, ecology, genetics, anatomy, physiology, cellular, molecular, and organismal biology.
- Explain and apply basic concepts in cell and molecular biology, evolutionary theory, human biology, genetics and ecology.
- Demonstrate skills in the use of equipment and apply safety practices in the laboratory and field settings.

Department of Biology Minor

BIOLOGY

MINOR CODE - UT02

Required Courses		
BIOL 111	General Biology	4
BIOL 112	General Biology	4
BIOL Electives (must include at least 9 credit hours of upper division courses)		16
Total Hours		24

Chemical Engineering

Degree Awarded

- Bachelor of Science in Chemical Engineering (B.S.Ch.E.)

Nature of Program

The Chemical Engineering program emphasizes undergraduate instruction. Graduates of this program have the skills and knowledge to become effective professional practitioners in a variety of industries and service organizations, as well as to be successful in programs of advanced study.

The Chemical Engineering department supports the development of West Virginia, the nation, and the global community by educating graduates who are employed in organizations that significantly contribute to the well - being of humanity.

This mission is filled by the achievement of the following program objectives:

- Program graduates will find employment in the energy, chemical, materials processing, biotechnology, and related industries. They may take positions in manufacturing, design, environmental affairs, technical service, and technical sales.
- Program graduates will progress into positions having significant professional responsibilities. These responsibilities may include management and supervisory duties, significant contributions on projects having value to the employer, and entrepreneurial activity.
- Program graduates will continue with advanced study. This may include graduate work in engineering, business, or the sciences, as well as the study of medicine or law.

FACULTY

CHAIR

- Garth E. Thomas Jr. - M.S.ChE (West Virginia University)

PROFESSOR

- Michael V. Minnick - Ph.D. (Clemson University)

ASSOCIATE PROFESSOR

- Gifty Osei-Prempeh - Ph.D. (Pennsylvania State University)

ASSISTANT PROFESSOR

- Kimberlyn Gray - Ph.D. (Louisiana Technical University)

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

CURRICULUM REQUIREMENTS

GEF Requirements		9
A minimum GPA of 2.0 across all classes applied to the major.		
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
MATH 155	Calculus 1 (GEF 3)	4
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
BIOL 240	Microbiology	4
CHEM 115	Fundamentals of Chemistry (GEF 2)	4
CHEM 116	Fundamentals of Chemistry (GEF 8)	4
CHEM 233 & CHEM 235	Organic Chemistry and Organic Chemistry Laboratory	4
CHEM 234	Organic Chemistry	3
PHYS 111	General Physics (GEF 8)	4
PHYS 112	General Physics	4
CSAD 270	Effective Public Speaking (GEF 4)	3
CHE 100	Introduction to Chemical Engineering	2
CHE 211	Material Balances	3
CHE 212	Energy Balances	3
CHE 316	Transport Operations	4
CHE 317	Transport Operations 2	4
CHE 318	Particle Processing Operations	2
CHE 320	Chemical Engineering Thermodynamics	3
CHE 327	Kinetics and Reactor Design	3
CHE 330	Modeling and Analysis	3
CHE 350	Chemical Engineering Laboratory	2
CHE 357	Design Laboratory 1	1
CHE 358	Design Laboratory 2	1

CHE 435	Chemical Process Control	3
CHE 450	Unit Operations Laboratory 1	2
CHE 451	Unit Operations Laboratory 2	2
CHE 457	Design Laboratory 3	2
CHE 458	Design Laboratory 4	2
ENGR 111	Software Tools for Engineers	3
ENGR 401	Senior Engineering Seminar	1
WVUE 191	First Year Seminar	1
Advanced Science Electives		4
MAE 410	Materials Science	
BIOL 230	Human Anatomy and Physiology 1	
BIOL 231	Human Anatomy and Physiology 2	
BIOL 303	Genetics	
BIOL 336	Vertebrate Embryology	
BIOL 338	Behavioral Ecology	
BIOL 343	Systematic Zoology	
BIOL 347	Parasitology	
BIOL 354	Organismal Botany	
BIOL 416	Cell Biology	
BIOL 417	Biotechnology	
BIOL 440	Comparative Anatomy	
BIOL 452	Plant Taxonomy	
BIOL 454	Immunology	
BIOL 461	Principles of Evolution	
BIOL 466	Ecology	
BIOL 493	Special Topics	
PHYS 314	Introductory Modern Physics	
Any Advanced Chemistry Course from below		
Advanced Chemistry Electives		3
CHEM 215	Introductory Analytical Chemistry	
CHEM 236	Organic Chemistry Laboratory	
CHEM 310	Instrumental Analysis	
CHEM 346	Physical Chemistry	
CHEM 347	Physical Chemistry Laboratory	
CHEM 348	Physical Chemistry	
CHEM 349	Physical Chemistry Laboratory	
CHEM 422	Intermediate Inorganic Chemistry	
CHEM 423	Inorganic Synthesis Laboratory	
CHEM 440	Quantum Chemistry	
CHEM 451	Biochemistry	
CHEM 493	Special Topics	
Chemical Engineering Electives		3
CHE 411	Advanced Heat Transfer	
CHE 417	Advanced Separation Processes	
CHE 461	Polymer Science and Engineering	
CHE 493	Special Topics	
CHE 496	Senior Thesis	
General Electives		12
Total Hours		126

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
CHE 100	2	ENGR 111	3
CHEM 115 (GEF 2)	4	CHEM 116 (GEF 8)	4
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
WVUE 191	1	GEF 5	3
	14		17

Second Year

Fall	Hours	Spring	Hours
CHE 211	3	CHE 212	3
CHEM 233 & CHEM 235	4	CHEM 234	3
MATH 251	4	BIOL 240	4
PHYS 111 (GEF 8)	4	PHYS 112	4
		CSAD 270 (GEF 4)	3
	15		17

Third Year

Fall	Hours	Spring	Hours
CHE 316	4	CHE 317	4
CHE 320	3	CHE 318	2
CHE 330	3	CHE 327	3
CHE 357	1	CHE 350	2
GEF 6	3	CHE 358	1
Enhancement Elective	3	Enhancement Elective	3
	17		15

Fourth Year

Fall	Hours	Spring	Hours
CHE 435	3	CHE 451	2
CHE 450	2	CHE 458	2
CHE 457	2	ENGR 401	1
GEF 7	3	Advanced Chemistry Elective	3
Advanced Science Elective	4	Chemical Engineering Elective	3
Enhancement Elective	3	Enhancement Elective	3
	17		14

Total credit hours: 126

Major Learning Goals

CHEMICAL ENGINEERING

Our graduates will be able to:

- Use the principles of chemistry, physics, and mathematics in the solution of engineering problems
- Use engineering science – conservation relations, thermodynamics, transport phenomena, and kinetics - in the solution of engineering problem
- Design systems and products that meet economic, quality, safety, and environmental requirements
- Use creativity and synthesis skills in the solution of open - ended problems
- Devise experiments, to use principles of experimental design, to collect data effectively, to evaluate data using appropriate statistical tools, and to draw sound conclusions from the analysis
- Use computing tools – mathematical analysis, information retrieval, document preparation, and communications
- Apply good safety practices and practice good environmental stewardship in both laboratory and design work
- Effectively communicate ideas, plans, and research in verbal and written form
- Gain new knowledge and/or enhance their skills through independent learning

- Work effectively as an individual and as a team member
- Apply professional codes of conduct to resolve ethical dilemmas
- Assess the political, cultural, economic, and aesthetic aspects of engineering practice, and to recognize the potential impact of technological developments on current events

Chemistry

Degree Awarded

- Bachelor of Science

Nature of Program

Chemistry is the study of the composition, structure and properties of matter. Chemists work in the growing fields of biotechnology, environmental science, catalysis, materials science, information and computer technologies, and many others. The study of chemistry is excellent preparation for medical, pharmacy, dental, and veterinary schools. Chemistry is also an excellent field of study to prepare for many other professional careers like patent law, chemical sales, and technical writing.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

A 2.0 GPA must be maintained in all CHEM courses.		
GEF Elective Requirements (4, 5, 6, and 7)		12
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
MATH 155	Calculus 1 (GEF 3)	4
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
CHEM 115	Fundamentals of Chemistry	4
CHEM 116	Fundamentals of Chemistry (GEF 8)	4
CHEM 215	Introductory Analytical Chemistry	4
CHEM 233 & CHEM 235	Organic Chemistry and Organic Chemistry Laboratory	4
CHEM 234 & CHEM 236	Organic Chemistry and Organic Chemistry Laboratory	4

CHEM 310 & CHEM 313	Instrumental Analysis and Instrumental Analysis Laboratory	4
CHEM 346 & CHEM 347	Physical Chemistry and Physical Chemistry Laboratory	4
CHEM 348 & CHEM 349	Physical Chemistry and Physical Chemistry Laboratory	5
CHEM 422 & CHEM 423	Intermediate Inorganic Chemistry and Inorganic Synthesis Laboratory	5
CHEM 490	Teaching Practicum: Peer-Led Team Learning	1
CHEM 494	Seminar	1
CHEM 497	Research	4
PHYS 111	General Physics (GEF 2)	4
PHYS 112	General Physics (GEF 8)	4
WVUE 191	First Year Seminar	1
Chemistry Electives (6 hours of 200+, 3 hours of 300+ level Chemistry elective)		9
Restricted Electives		21
Assessment Examination		0
Total Hours		120

Restricted Electives

BIOL 111	General Biology	4
BIOL 112	General Biology	4
BIOL 225	Biology Methods	3
BIOL 240	Microbiology	4
BIOL 303	Genetics	4
BIOL 416	Cell Biology	4
BIOL 461	Principles of Evolution	3
BIOL 466	Ecology	4
CE 204	Surveying	3
CE 312	Construction Materials	3
CE 331	Transportation Engineering	3
CE 347	Introduction to Environmental Engineering	4
CE 351	Introductory Soil Mechanics	4
CE 361	Structural Analysis 1	4
CE 411	Pavement Design	3
CE 421	Hydraulic Engineering	4
CE 422	Advanced Hydraulic Engineering	3
CE 425	Engineering Hydology	3
CE 431	Highway Engineering	3
CE 432	Traffic Engineering	3
CE 444	Advanced Sanitary Engineering	3
CE 446	Solid Waste Management	3
CE 451	Foundation Engineering	3
CE 452	Groundwater and Seepage	3
CE 453	Earthwork Design	3
CE 461	Structural Analysis 2	3
CE 462	Reinforced Concrete Design	3
CE 463	Steel Design	3
CE 464	Timber Design	3
CE 479	Integrated Civil Engineering Design-Capstone	3
CHE 100	Introduction to Chemical Engineering	2
CHE 201	Material and Energy Balances 1	3

CHE 202	Material and Energy Balances 2	3
CHE 312	Separation Processes	3
CHE 316	Transport Operations	4
CHE 318	Particle Processing Operations	2
CHE 320	Chemical Engineering Thermodynamics	3
CHE 327	Kinetics and Reactor Design	3
CHE 330	Modeling and Analysis	3
CHE 350	Chemical Engineering Laboratory	2
CHE 357	Design Laboratory 1	1
CHE 358	Design Laboratory 2	1
CHE 435	Chemical Process Control	3
CHE 450	Unit Operations Laboratory 1	2
CHE 451	Unit Operations Laboratory 2	2
CHE 457	Design Laboratory 3	2
CHE 458	Design Laboratory 4	2
CIET 320	Construction Methods and Equipment	3
CIET 325	Codes, Contracts, and Cost Analysis	3
CIET 330	Computer Applications in Hydraulics and Hydrology	3
CIET 382	Environmental Engineering Technology	3
CPE 271 & CPE 272	Introduction to Digital Logic Design and Digital Logic Laboratory	4
CPE 310 & CPE 311	Microprocessor Systems and Microprocessor Laboratory	4
CPE 421	Embedded Systems	4
CPE 442	Introduction to Digital Computer Architecture	3
CS 112	Computer Science - Engineers 1	3
CS 121	Computer Science 1	4
CS 122	Computer Science 2	4
CS 201	Data Structures	3
CS 220	Discrete Mathematics	3
CS 221	Analysis of Algorithms	3
CS 222	Intro Software Engineering	3
CS 231	Introduction to Computer Organization	3
CS 265	C Programming	2
CS 310	Principles of Programming Languages	3
CS 321	Introduction to Networking	3
CS 324	Database Management	3
CS 350	Computer System Concepts	3
CS 410	Compiler Construction	3
CS 450	Operating Systems Structure	3
CS 479	Advanced Computer Science Mathematics	3
DRET 120	Drafting 1	2
DRET 314	Computer Graphics	3
EE 200	Software Tools	2
EE 221 & EE 222	Introduction to Electrical Engineering and Introduction to Electrical Engineering Laboratory	4
EE 223 & EE 224	Electrical Circuits and Electrical Circuits Laboratory	4
EE 311	Junior Instrumentation Lab	1
EE 327	Signals and Systems 1	3
EE 329	Signals and Systems 2	3
EE 335 & EE 336	Electromechanical Energy Conversion and Systems and Electromechanical Energy Conversion and Systems Lab	4

EE 345	Engineering Electromagnetics	3
EE 355 & EE 356	Analog Electronics and Analog Electronics Laboratory	4
EE 411	Fundamentals of Control Systems	3
EE 412	Automatic Control Lab	1
EE 435	Introduction to Power Electronics	3
EE 436	Power Systems Analysis	3
EE 461	Introduction to Communications Systems	3
ELET 315	Electronic Measurement and Instrumentation	4
ELET 337	Communication Systems 2	4
ELET 410	Control Systems Technology	3
ELET 420	Microprocessors and Digital Systems	4
ELET 426	Microprocessor-Based Data Acquisition and Control	4
ELET 436	Programmable Logic Controllers	4
ENGR 101	Engineering Problem Solving 1	2
ENGR 111	Software Tools for Engineers	3
ENGR 402	Fundamentals of Engineering Review	2
GNET 410	C++ Programming for Technology	3
GNET 412	Project Management	3
GNET 489	Senior Seminar and Project	2
INDT 302	Industrial Safety	3
INDT 308	Automated Manufacturing	3
INDT 354	Industrial Materials	3
INDT 384	Robotics 1	3
INDT 410	Plant Equipment and Maintenance	3
INDT 420	Construction Technology	3
ISYS 101	Introduction to Information Systems 1	3
ISYS 102	Introduction to Information Systems 2	3
ISYS 115	Discrete Structures	3
ISYS 270	Linux	3
ISYS 325	C#	3
ISYS 366	e-Commerce	3
MAE 201	Applied Engineering Analysis	3
MAE 215	Intro to Aerospace Engineering	3
MAE 240	Manufacturing Processes	3
MAE 241	Statics	3
MAE 242	Dynamics	3
MAE 243	Mechanics of Materials	3
MAE 244	Dynamics and Strength Laboratory	1
MAE 316	Analysis-Engineering Systems	3
MAE 320	Thermodynamics	3
MAE 321	Applied Thermodynamics	3
MAE 331	Fluid Mechanics	3
MAE 332	Experimental Methods	1
MAE 333	Mechanical Measurements	1
MAE 335	Incompressible Aerodynamics	3
MAE 336	Compressible Aerodynamics	3
MAE 340	Vibrations	3
MAE 342	Dynamics of Machines	3
MAE 343	Intermediate Mechanics of Materials	3
MAE 345	Aerospace Structures	3
MAE 365	Flight Dynamics	3

MAE 405	Senior Mechanical Engineering Lab	1
MAE 410	Materials Science	4
MAE 419	Heat Transfer Lab	1
MAE 423	Heat Transfer	3
MAE 426	Flight Vehicle Propulsion	3
MAE 434	Experimental Aerodynamics	2
MAE 454	Machine Design and Manufacturing	3
MAE 455	Computer Aided Drafting and Design	3
MAE 456	Computer-Aided Design and Finite Element Analysis	3
MAE 460	Automatic Controls	3
MAE 475	Flight Vehicle Design-Capstone	3
MAE 476	Space Flight and Systems	3
MAE 480	System Design 1	3
MAE 481	Systems Design 2	3
MATH 283	Introduction to the Concepts of Mathematics	3
MATH 341	Introduction to Algebraic Structures	3
MATH 441	Applied Linear Algebra	3
MATH 448	Probability and Statistics	3
MATH 451	Introduction to Real Analysis 1	3
MATH 452	Introduction to Real Analysis 2	3
MEET 316	Dynamics	3
MEET 435	Energy Conversion Systems	3

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
CHEM 115	4	CHEM 116 (GEF 8)	4
WVUE 191	1	PHYS 111 (GEF 2)	4
GEF 4	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
CHEM 215	4	CHEM 234 & CHEM 236	4
CHEM 233 & CHEM 235	4	MATH 261	4
MATH 251	4	Restricted Elective	3
PHYS 112 (GEF 8)	4	GEF 6	3
	16		14

Third Year

Fall	Hours	Spring	Hours
ENGL 305	3	CHEM 310 & CHEM 313	4
CHEM 346 & CHEM 347	4	CHEM 348 & CHEM 349	5
Restricted Elective	6	Restricted Elective	6
GEF 7	3		
	16		15

Fourth Year			
Fall	**Hours**	**Spring**	**Hours**
CHEM 422 & CHEM 423	5	CHEM 490	1
CHEM 494	1	CHEM 497	4
Chemistry Elective	6	Chemistry Elective	3
Restricted Elective	3	Restricted Elective	3
Assessment Examination		GEF 5	3
	15		14

Total credit hours: 120

Major Learning Goals

CHEMISTRY

In addition to the general education learning outcomes listed elsewhere in the catalog, the Chemistry Department's Bachelor of Science program is designed to meet broad educational objectives and learning outcomes, which prepare students:

- To apply fundamental chemical concepts and relationships in the solution of diverse scientific problems.
- With knowledge and application of chemical analytical instrumentation, experimental design, and scientific data collection and interpretation.
- With diverse laboratory skills and techniques.
- With knowledge and application of good laboratory safety practices and environmental responsibility.
- With the ability to effectively communicate technical information through writing and speaking.
- For professional employment in the various scientific fields or to continue with advanced study, which may include graduate work in business, the sciences, health professions or law.

Department of Physical Sciences Minor

CHEMISTRY

MINOR CODE - UT04

A minimum overall GPA of 2.0 is required for this minor.		
A minimum grade of D- is required for the courses in this minor.		
Required Courses		
CHEM 115	Fundamentals of Chemistry	4
CHEM 116	Fundamentals of Chemistry	4
CHEM 233 & CHEM 235	Organic Chemistry and Organic Chemistry Laboratory	4
CHEM 234 & CHEM 236	Organic Chemistry and Organic Chemistry Laboratory	4
Select two of the following courses:		8
CHEM 215	Introductory Analytical Chemistry	
CHEM 346 & CHEM 347	Physical Chemistry and Physical Chemistry Laboratory	
CHEM 348 & CHEM 349	Physical Chemistry and Physical Chemistry Laboratory	
Total Hours		24

Civil Engineering

Degree Awarded

- Bachelor of Science in Civil Engineering (B.S.C.E.)

Nature of Program

Civil Engineering, the most diverse branch of engineering, is directly related to the planning, design, construction, and maintenance of the infrastructure that directly affects public life. The infrastructure includes bridges, buildings, foundations, dams, sanitary and solid waste disposal systems, highways, airport facilities, transportation systems, waterways, hydroelectric installations, pipelines, coal preparation and loading facilities, and other systems and

structures. Civil engineering also involves the understanding of environmental issues and geotechnical principles and how they relate to the design of the infrastructure.

Engineering students get a sound basic knowledge of science and a set of core courses in the humanities and social sciences. The Civil Engineering curriculum has been designed to give the student a broad coverage of all fields of civil engineering with some flexibility to explore a particular field of choice. This approach gives the WVU Tech graduate a well - rounded background to handle civil engineering project.

Design is incorporated across the Civil Engineering curriculum with the design experience beg inning early with the Surveying and Mechanics of Materials courses. Design exposure continues in the junior and senior years, with a minimum of 11 courses having design components for a total of 17.5 credit hours of design. Design content is incorporated in the required courses such as Introductory Soil Mechanic s, Hydraulic Engineering, Construction Materials, Transportation Engineering, Introduction to Environmental Engineering, the required structural design elective (Steel Design or Reinforced Concrete Design), the required geotechnical elective (Foundation Engineering, Earthwork Design, or Groundwater and Seepage), the required environmental elective (Advanced Sanitary Engineering, Solid Waste Management, Engineering Hydrology, or Advanced Hydraulic Engineering), and the required transportation elective (Highway Engineering, Pavement Design, or Traffic Engineering). Two additional electives (one CE Elective and one Technical Elective) must contain a minimum total of two credit hours of design content.

The design component is completed with a capstone design course (Integrated Civil Engineering Design) in which student teams are responsible for the completion of a comprehensive civil engineering project which involves several civil engineering disciplines with oral and written presentations of the project. Discussion and consideration of constraints such as economic factors, safety, reliability, aesthetics, ethics, and environmental impact are incorporated as a normal part of most design courses. Aesthetics and environmental impact are stressed in the Introduction to Environmental Engineering course; and ethics, safety, and professional issues are covered in the Senior Engineering Seminar course. In addition to design, the Integrated Civil Engineering Design course includes principles of project and/or construction management, cost analysis and estimating, and scheduling.

Program Mission/Goals

- To prepare students to be able to apply science and mathematics to the analysis of civil engineering problems and the design of infrastructure systems to increase human welfare and promote sustainable development
- To prepare well - rounded students to practice engineering in a professional environment and to be successful in graduate school should they choose to attend
- To help students recognize the role of the civil engineer in contemporary society, especially with respect to the societal and environmental contexts of civil engineering projects
- To energize students to maximize individual potential, including acquisition of necessary skills and recognition of the need for continuing education and lifelong growth and development

Educational Objectives

- Our graduates will obtain employment in the civil engineering field and will hold positions having significant professional responsibility.
- Our graduates will obtain professional registration.
- Our graduates will be prepared academically and those who choose advanced studies will be successful.
- Our graduates will be equipped to learn new skills as they progress in their careers and, as a result, will possess their capabilities to move to positions having increased leadership, mentoring, and management responsibilities.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3

F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

GEF Requirements		9
WVUE 191	First Year Seminar	1
DRET 120	Drafting 1	2
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
ECON 401	Managerial Economics (GEF 4)	3
GEOL 312	Geology	3
A minimum overall 2.0 GPA is required.		
ENGR 111	Software Tools for Engineers	3
ENGR 401	Senior Engineering Seminar	1
ENGR 402	Fundamentals of Engineering Review	2
MAE 241	Statics	3
MAE 242	Dynamics	3
MAE 243	Mechanics of Materials	3
MAE 331	Fluid Mechanics	3
MATH 155	Calculus 1 (GEF 3)	4
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
MATH 448	Probability and Statistics	3
CHEM 115	Fundamentals of Chemistry (GEF 8)	4
CHEM 116	Fundamentals of Chemistry (GEF 8)	4
PHYS 111	General Physics (GEF 2)	4
CE 204	Surveying	3
CE 312	Construction Materials	3
CE 331	Transportation Engineering	3
CE 347	Introduction to Environmental Engineering	4
CE 351	Introductory Soil Mechanics	4
CE 361	Structural Analysis 1	4
CE 421	Hydraulic Engineering	4
CE 479	Integrated Civil Engineering Design-Capstone	3
CE Electives (select one from each area)		15
CE 461	Structural Analysis 2	
CE 464	Timber Design	
CE 497	Research	
Any other 300 or 400 level CE course [*]		
Environmental/Water Resources		
CE 422	Advanced Hydraulic Engineering	
CE 425	Engineering Hydology	
CE 444	Advanced Sanitary Engineering	
CE 446	Solid Waste Management	
Geotechnical		
CE 451	Foundation Engineering	
CE 452	Groundwater and Seepage	
CE 453	Earthwork Design	

Structural Design		
CE 462	Reinforced Concrete Design	
CE 463	Steel Design	
Transportation		
CE 411	Pavement Design	
CE 431	Highway Engineering	
CE 432	Traffic Engineering	
Technical Electives (see list below) *		6
Total Hours		125

* Out of these nine hours of electives (3 hours of required CE elective and 6 hours of Technical Electives), there must be at least 2 hours of ABET design content.

Technical Electives

Any 300 or 400 level CE course

BIOL 240	Microbiology	4
CHEM 215	Introductory Analytical Chemistry	4
CHEM 233	Organic Chemistry	3
CHEM 234	Organic Chemistry	3
EE 221	Introduction to Electrical Engineering	3
MATH 420	Numerical Analysis 1	3
MATH 441	Applied Linear Algebra	3
MAE 320	Thermodynamics	3
MAE 340	Vibrations	3
MAE 445	Computer Applications in Engineering	3
MAE 456	Computer-Aided Design and Finite Element Analysis	3
PHYS 112	General Physics	4

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
WVUE 191	1	MAE 241	3
CHEM 115 (GEF 8)	4	ENGR 111	3
DRET 120	2	CHEM 116 (GEF 8)	4
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
	14		17

Second Year

Fall	Hours	Spring	Hours
MAE 242	3	MAE 331	3
MAE 243	3	CE 361	4
CE 204	3	MATH 261	4
MATH 251	4	CE 331	3
PHYS 111 (GEF 2)	4	GEOL 312	3
	17		17

Third Year

Fall	Hours	Spring	Hours
CE 312	3	CE 351	4
CE 421	4	CE 347	4
MATH 448	3	ENGL 305	3
CE Elective	3	CE Elective	3

GEF 5	3		
	16		14
Fourth Year			
Fall	**Hours**	**Spring**	**Hours**
ECON 401 (GEF 4)	3	CE 479	3
CE Elective	3	ENGR 401	1
CE Elective	3	ENGR 402	2
Technical Elective	3	CE Elective	3
GEF 6	3	Technical Elective	3
		GEF 7	3
	15		15

Total credit hours: 125

Major Learning Goals

CIVIL ENGINEERING

Our graduates will demonstrate:

- An ability to function on multidisciplinary teams.
- An ability to identify, formulate, and solve civil engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- A recognition of the need for, and an ability to engage in life-long learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
- An ability to apply sound safety practices in laboratory and design work.
- An ability to develop and manage budgets and schedules.

Computer Engineering

Degree Awarded

- Bachelor of Science in Computer Engineering (B.S.Cp.E.)

Nature of Program

The effects of computer engineering are seen in all facets of our lives. Computer engineers develop systems that can perform very useful operations such as what can be found in high-end computers, devices for networking switches and hubs and for manufacturing control, and systems in automobiles, fax machines, and microwave ovens. Even cell phones have sophisticated computational operations that provide useful features and capabilities, and the work of computer engineers has enabled this technology to be readily available.

The Bachelor of Science in Computer Engineering degree program provides students with the knowledge and skills to ensure successful employment and advancement as an engineer, as well as, to pursue further education. We give students a solid foundation in mathematics and the sciences with a special emphasis on the fundamentals of computer science and electrical engineering relevant to computer engineering. We provide the general education to put the technical knowledge into perspective. The student can pursue special areas of interest through several elective courses. Upon graduation the student will be well prepared to be successful and productive in the workforce.

One of the key features of engineering that sets it apart from other disciplines is design. Design is the creative process of putting ideas, components, and systems together to develop solutions to problems and needs. The curriculum encourages design-oriented thinking at a fundamental level and culminates in the capstone senior design course sequence in which many factors such as technical, economic, environmental, ethical and legal, health and safety, manufacturability, political, social, sustainability, and realistic standards are considered. The program further encourages the development of good communication skills in written, oral and electronic forms.

Educational Objectives

After graduation, students will accomplish one or more of the following objectives:

- **Professional Practice**: Computer engineering graduates will be successful in professional practice in engineering.
- **Post-graduate Education**: Computer engineering graduates will be successful in pursuing advanced education.

- **Advancement**: Computer engineering graduates will successfully advance in their careers.

FACULTY

PROFESSOR

- Asad Davari - PhD

ASSOCIATE PROFESSOR

- Mingyu Lu - PhD

ASSISTANT PROFESSORS

- Yadi Eslami - PhD
- Kenan Hatipoglu - PhD
- Houbing Song - PhD

CHAIR

- Stephen Goodman - PhD

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

A minimum GPA of 2.0 is required in all CHEM, ENGR, CS, CPE, EE, MATH, PHYS, ENGL 305, and all technical elective courses.

GEF Requirements		9
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
MATH 155	Calculus 1 (GEF 3)	4
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
MATH 378	Discrete Mathematics	3
MATH 448	Probability and Statistics	3
CHEM 115	Fundamentals of Chemistry (GEF 8)	4
PHYS 111	General Physics (GEF 2)	4
PHYS 112	General Physics (GEF 8)	4
ECON 401	Managerial Economics (GEF 4)	3

CPE 271 & CPE 272	Introduction to Digital Logic Design and Digital Logic Laboratory	4
CPE 320 & CPE 321	Microprocessor Systems and Microprocessor Systems Laboratory	4
CPE 421	Embedded Systems	4
CPE 442	Introduction to Digital Computer Architecture	3
CS 121	Computer Science 1	4
CS 122	Computer Science 2	4
CS 201	Data Structures	3
CS 222	Intro Software Engineering	3
CS 321	Introduction to Networking	3
EE 200	Software Tools	2
EE 221 & EE 222	Introduction to Electrical Engineering and Introduction to Electrical Engineering Laboratory	4
EE 223 & EE 224	Electrical Circuits and Electrical Circuits Laboratory	4
EE 311	Junior Instrumentation Lab	1
EE 327	Signals and Systems 1	3
EE 365 & EE 366	Analog Electronics and Analog Electronics Laboratory	4
EE 400	Community Service	0
EE 480	Senior Design Seminar	3
EE 481	Senior Design Project	3
ENGR 101	Engineering Problem Solving 1	2
WVUE 191	First Year Seminar	1
Computer Engineering Electives		6
CPE 421	Embedded Systems	
CPE 442	Introduction to Digital Computer Architecture	
CPE 450	Introduction to Microelectronics Circuits	
CPE 455	VLSI Design	
CPE 462	Wireless Networking	
CPE 493	Special Topics	
Technical Electives (see list below)		6
Total Hours		126

Technical Electives

BIOL 230	Human Anatomy and Physiology 1	4
BIOL 231	Human Anatomy and Physiology 2	4
BIOL 233	Anatomy and Physiology	4
BIOL 240	Microbiology	4
BIOL 303	Genetics	4
CHEM 215	Introductory Analytical Chemistry	4
CHEM 233	Organic Chemistry	3
CHEM 235	Organic Chemistry Laboratory	1
CS 201	Data Structures	3
CS 221	Analysis of Algorithms	3
CS 222	Intro Software Engineering	3
CS 264	Data Base Management	3
CS 310	Principles of Programming Languages	3
CS 321	Introduction to Networking	3
CS 324	Database Management	3
CS 350	Computer System Concepts	3
CS 410	Compiler Construction	3

CS 450	Operating Systems Structure	3
CS 454	Cryptology	3
CS 456	Digital Image Processing	3
CS 465	Introduction to Cybersecurity	3
CS 470	Introduction to Computer Graphics	3
CS 472	Artificial Intelligence	3
CS 475	Game Development	3
MAE 241	Statics	3
MAE 242	Dynamics	3
MAE 243	Mechanics of Materials	3
MAE 320	Thermodynamics	3
MAE 321	Applied Thermodynamics	3
MAE 331	Fluid Mechanics	3
MAE 407	Power Plant Engineering	3
PHYS 314	Introductory Modern Physics	4
Any CPE (Computer Engineering) Course		
Any EE (Electrical Engineering) Course		

Business Technical Electives

No more than one course (3 credits) can be used from this list.

ACCT 201	Principles of Accounting	3
ACCT 202	Principles of Accounting	3
BCOR 350	Principles of Marketing	3
BCOR 360	Supply Chain Management	3
BCOR 370	Managing Individuals and Teams	3
ENTR 201	Business Planning	3
FIN 310	Investments	3
FIN 321	Personal Finance	3
FIN 325	Financial Management 1	3
FIN 326	Financial Management 2	3
FIN 480	International Finance	3
MANG 310	Management of Small Business	3
MANG 350	Leadership In Business	3
MANG 422	The Individual and the Organization	3
MKTG 315	Buyer Behavior	3
MKTG 325	Marketing Research	3
MKTG 485	Global Marketing	3

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
WVUE 191	1	ENGR 101	2
CS 121	4	CS 122	4
CHEM 115 (GEF 8)	4	GEF 5	3
	16		16

Second Year

Fall	Hours	Spring	Hours
MATH 251	4	MATH 261	4
PHYS 111 (GEF 2)	4	PHYS 112	4
EE 200	2	EE 223	3

EE 221	3	EE 224	1
EE 222	1	CPE 271	3
CS 201	3	CPE 272	1
	17		16

Third Year

Fall	**Hours**	**Spring**	**Hours**
EE 365	3	EE 311	1
EE 366	1	CPE 421	4
EE 327	3	CS 222	3
CPE 320	3	MATH 378	3
CPE 321	1	ENGL 305	3
MATH 448	3		
GEF 6	3		
	17		14

Fourth Year

Fall	**Hours**	**Spring**	**Hours**
EE 480	3	EE 481	3
CPE 442	3	EE 400	0
CS 321	3	CPE Elective	3
ECON 401 (GEF 4)	3	Techincal Elective	3
CPE Elective	3	Techincal Elective	3
		GEF 7	3
	15		15

Total credit hours: 126

Major Learning Goals

COMPUTER ENGINEERING

- **Engineering Science:** Students will attain an ability to apply knowledge of mathematics, science, and engineering.
- **Engineering Experimentation**: Students will attain an ability to design and conduct experiments, as well as to analyze and interpret data.
- **Engineering Design**: Students will attain an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- **Teamwork**: Students will attain an ability to function on multidisciplinary teams.
- **Problem Solving**: Students will attain an ability to identify, formulate, and solve engineering problems.
- **Engineering Ethics**: Students will attain an understanding of professional and ethical responsibility.
- **Effective Communication**: Students will attain an ability to communicate effectively.
- **Impact of Engineering**: Students will attain the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- **Life-long Learning**: Students will attain a recognition of the need for, and an ability to engage in life-long learning.
- **Contemporary Issues**: Students will attain a knowledge of contemporary issues.
- **Modern Tools**: Students will attain an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Computer Science

Degree Awarded

- Bachelor of Science

Nature of Program

Computer scientists are distinguished from other computer professionals, such as information technology specialists and system administrators, by the higher level of theoretical expertise, the innovation they apply to complex problems, and the extensive knowledge and experience they possess in software engineering. A computer scientist can often expect to work on multidisciplinary projects such as robotics, human - computer interaction, advanced computer graphics, and artificial intelligence based systems.

The first two years of study in the Bachelor of Science in Computer Science (BS CS) program focus on the fundamentals of computer science concepts and provide a firm foundation in mathematics. During the junior and senior years, students are introduced to advanced concepts in the science of computation and are presented the opportunity to take elective courses such as video game development, cryptology, computer graphics, artificial intelligence and image processing. The two semester senior project sequence provides the culminating experience for the Computer Science students. Students may also have the opportunity to participate in undergraduate research projects with the computer science faculty.

Educational Objectives

In three to five years after graduation, the graduates of the WVU Tech BS degree program in Computer Science will do the following:

- Demonstrate success in the professional practice of Computer Science through recognition of their contributions to an organization or entrepreneurial accomplishments.
- Alternatively or additionally, demonstrate success in the field of computing by continuing formal education through earning post graduate degrees, technical certificates, or other technical training.
- Demonstrate lifelong learning habits either as a professional or a researcher in their field.

FACULTY

CHAIR

- Ranjith Munasinghe - PhD, University of Wyoming

ASSOCIATE PROFESSOR

- Don Smith - MS, West Virginia University; MA, Marshall University

ASSISTANT PROFESSOR

- Afrin Naz - PhD, University of North Texas
- Stephany Coffman-Wolph - PhD, Western Michigan University
- Sanish Rai - PhD, Georgia State University

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

A minimum GPA of 2.0 is require.		
GEF Elective Requirements (2, 5, 6, 7, and 8)		20
Laboratory Science, GEF 2 and 8 (a total of 8 credit hours required) - Students may select any of the two courses from the following list:		
BIOL 111	General Biology	

BIOL 112	General Biology	
CHEM 111	Survey of Chemistry	
CHEM 112	Survey of Chemistry	
CHEM 115	Fundamentals of Chemistry	
CHEM 116	Fundamentals of Chemistry	
PHYS 101	Introductory Physics	
PHYS 102	Introductory Physics	
PHYS 111	General Physics	
PHYS 112	General Physics	
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
MATH 155	Calculus 1 (GEF 3)	4
MATH 156	Calculus 2	4
MATH 251	Multivariable Calculus	4
MATH 441	Applied Linear Algebra	3
MATH 448	Probability and Statistics	3
ECON 401	Managerial Economics (GEF 4)	3
WVUE 191	First Year Seminar	1
CS 121	Computer Science 1	4
CS 122	Computer Science 2	4
CS 201	Data Structures	3
CS 220	Discrete Mathematics	3
CS 221	Analysis of Algorithms	3
CS 222	Intro Software Engineering	3
CS 231	Introduction to Computer Organization	3
CS 265	C Programming	2
CS 310	Principles of Programming Languages	3
CS 321	Introduction to Networking	3
CS 324	Database Management	3
CS 355	Computer Concepts	3
CS 410	Compiler Construction	3
CS 450	Operating Systems Structure	3
CS 479	Advanced Computer Science Mathematics	3
CS 480	Senior Design	2
CS 481	Senior Project	3
Computer Science Electives (Students may select from 300-400 Level Computer Science (CS) courses except CS 491)		9
Technical Electives (See approved list)		6
General Electives (Students are free to choose any college level course to fulfill this requirement)		3
Total Hours		120

Approved Technical Electives

Accounting	
ACCT 201	Principles of Accounting
ACCT 202	Principles of Accounting
Biology	
BIOL 111	General Biology **
BIOL 112	General Biology **
Chemistry	
CHEM 111	Survey of Chemistry **
CHEM 112	Survey of Chemistry **
CHEM 115	Fundamentals of Chemistry **

CHEM 116	Fundamentals of Chemistry **
Computer Engineering	
CPE 271	Introduction to Digital Logic Design
Computer Science	
CS 300+ or 400+ (Except CS 491)	
Electrical Engineering	
EE 221	Introduction to Electrical Engineering
EE 223	Electrical Circuits
MAE 241	Statics
MAE 242	Dynamics
MAE 243	Mechanics of Materials
MAE 331	Fluid Mechanics
ISYS 270	Linux
ISYS 325	C#
ISYS 366	e-Commerce
MATH 261	Elementary Differential Equations
Physics	
PHYS 101	Introductory Physics **
PHYS 102	Introductory Physics **
PHYS 111	General Physics **
PHYS 112	General Physics **

**** Unless taken as a science requirement**

Other courses are accepted as technical electives only with advance approval from the department. Most of the 300-400 level ACCT, BIOL, CHEE, CHEM, CPE, CE, EE, MAE, MATH, and PHYS courses are considered acceptable.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
CS 121	4	CS 122	4
WVUE 191	1	GEF 6	3
General Elective	3	GEF 7	3
GEF 5	3	GEF 8	3
	14		16

Second Year

Fall	Hours	Spring	Hours
MATH 155 (GEF 3)	4	MATH 156	4
CS 201	3	CS 220	3
CS 231	3	CS 222	3
CS 265	2	CS 310	3
GEF 2 (Laboratory Science)	4	GEF 8 (Laboratory Science)	4
	16		17

Third Year

Fall	Hours	Spring	Hours
ECON 401 (GEF 4)	3	ENGL 305	3
MATH 251	4	MATH 441	3
CS 221	3	CS 324	3
CS 321	3	CS 355	3
		Computer Science Elective	3
	13		15

Fourth Year		
Fall	**Hours Spring**	**Hours**
MATH 448	3 CS 410	3
CS 450	3 CS 479	3
CS 480	2 CS 481	3
Computer Science Elective	3 Computer Science Elective	3
Technical Elective	3 Technical Elective	3
	14	15

Total credit hours: 120

Major Learning Goals

COMPUTER SCIENCE

The BS degree in Computer Science at WVU Tech enables students to attain:

- An ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
- An ability to function effectively on teams to accomplish a com mon goal
- An understanding of professional, ethical, legal, security and social issues and responsibilities
- An ability to communicate effectively with a range of audiences
- An ability to analyze the local and global impact of computing on individuals, organizations, and society
- Recognition of the need for and an ability to engage in continuing professional development
- An ability to use current techniques, skills, and tools necessary for computing practice.
- An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.
- An ability to apply design and development principles in the construction of software systems of varying complexity.

Department of Computer Science and Information Systems Minor

COMPUTER SCIENCE

MINOR CODE - UT24

Student must earn a grade of C or better for each of the courses counted towards the minor.

Required Courses		
CS 121	Computer Science 1	4
CS 122	Computer Science 2	4
Complete the requirements for one of the following tracks:		8-9
Programming Track		
CS 201	Data Structures	
CS 222	Intro Software Engineering	
CS 310	Principles of Programming Languages	
Systems Track		
CS 231	Introduction to Computer Organization	
CS 265	C Programming	
CS 350	Computer System Concepts	
Select two of the following courses:		6
CS 321	Introduction to Networking	
CS 324	Database Management	
CS 410	Compiler Construction	
CS 450	Operating Systems Structure	
CS 465	Introduction to Cybersecurity	
CS 472	Artificial Intelligence	
Total Hours		22-23

Electrical Engineering

Degree Awarded

- Bachelor of Science in Electrical Engineering (B.S.E.E.)

Nature of Program

Electrical engineering is one of the most dynamic fields of engineering today. New technologies are under constant development and new industries are emerging as a result of the efforts of electrical engineers.

The Electrical Engineering curriculum provides a well-rounded education to meet the needs and challenges of our modern society. The student will receive a solid background in mathematics and science, as well as, a strong foundation in the major areas of electrical engineering (circuits and systems, computers, electronics, electromagnetic fields, controls, communications, electric machinery and power) supported by practical-oriented laboratory assignments. The student can pursue special areas of interest through several elective courses. The student will be well prepared to be successful in the workforce and be productive.

One of the key features of engineering that sets it apart from other disciplines is design. Design is the creative process of putting ideas, components, and systems together to develop solutions to problems and needs. The curriculum encourages design-oriented thinking at a fundamental level and culminates in the capstone senior design course sequence in which many factors such as technical, economic, environmental, ethical and legal, health and safety, manufacturability, political, social, sustainability, and realistic standards are considered.

The ability of the engineer to communicate in writing and speech is very important as the modern engineer is expected to express technical concepts and defend technical decisions in front of non-technical people. Therefore, courses in English, social science, and the humanities are vital in the Electrical Engineering curriculum.

Educational Objectives

After graduation, students will accomplish one or more of the following objectives:

- **Professional Practice**: Electrical engineering graduates will be successful in professional practice in engineering.
- **Post-graduate Education**: Electrical engineering graduates will be successful in pursuing advanced education.
- **Advancement**: Electrical engineering graduates will successfully advance in their careers.

ADMINISTRATION

PROGRAM ASSISTANT II

- Naomi Bowles - BA

FACULTY

PROFESSOR

- Asad Davari - PhD

ASSOCIATE PROFESSOR

- Mingyu Lu - PhD

ASSISTANT PROFESSORS

- Yadi Eslami - PhD
- Kenan Hatipoglu - PhD
- Houbing Song - PhD

CHAIR

- Stephen Goodman - PhD

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations	
F1 - Composition & Rhetoric	3-6

ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

A minimum GPA of 2.0 is required in all CHEM, ENGR, CS, CPE, EE, MATH, PHYS, ENGL 305, and all technicall elective courses.

GEF Elective Requirements (5, 6, and 7)		9
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
MATH 155	Calculus 1 (GEF 3)	4
MATH 156	Calculus 2	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
MATH 441	Applied Linear Algebra	3
MATH 448	Probability and Statistics	3
CHEM 115	Fundamentals of Chemistry (GEF 8)	4
PHYS 111	General Physics (GEF 8)	4
PHYS 112	General Physics (GEF 8)	4
WVUE 191	First Year Seminar	1
CPE 271 & CPE 272	Introduction to Digital Logic Design and Digital Logic Laboratory	4
CPE 320 & CPE 321	Microprocessor Systems and Microprocessor Systems Laboratory	4
CS 112	Computer Science - Engineers 1	3
ECON 401	Managerial Economics (GEF 4)	3
ENGR 101	Engineering Problem Solving 1	2
EE 200	Software Tools	2
EE 221 & EE 222	Introduction to Electrical Engineering and Introduction to Electrical Engineering Laboratory	4
EE 223 & EE 224	Electrical Circuits and Electrical Circuits Laboratory	4
EE 311	Junior Instrumentation Lab	1
EE 327	Signals and Systems 1	3
EE 329	Signals and Systems 2	3
EE 335 & EE 336	Electromechanical Energy Conversion and Systems and Electromechanical Energy Conversion and Systems Lab	4
EE 345	Engineering Electromagnetics	3
EE 365 & EE 366	Analog Electronics and Analog Electronics Laboratory	4
EE 411	Fundamentals of Control Systems	3
EE 412	Automatic Control Lab	1
EE 436	Power Systems Analysis	3

EE 461	Introduction to Communications Systems	3
EE 480	Senior Design Seminar	3
EE 481	Senior Design Project	3
EE 400	Community Service	0
EE/CPE Electives (Select two of the following):		6
CPE 421	Embedded Systems	
CPE 442	Introduction to Digital Computer Architecture	
CPE 450	Introduction to Microelectronics Circuits	
CPE 455	VLSI Design	
CPE 462	Wireless Networking	
CPE 493	Special Topics	
EE 405	Protective Relaying	
EE 413	Introduction to Digital Control	
EE 427	Introduction to Robotics	
EE 431	Electrical Power Distribution Systems	
EE 434	Alternative Energy Resources	
EE 435	Introduction to Power Electronics	
EE 437	Fiber Optics Communications	
EE 445	Introduction to Antennas	
EE 452	Network Synthesis	
EE 456	RF Design	
EE 463	Digital Signal Processing Fundamentals	
EE 493	Special Topics	
Technical Electives (See approved list)		6
Total Hours		125

Technical Electives

BIOL 230	Human Anatomy and Physiology 1	4
BIOL 231	Human Anatomy and Physiology 2	4
BIOL 233	Anatomy and Physiology	4
BIOL 240	Microbiology	4
BIOL 303	Genetics	4
CHEM 215	Introductory Analytical Chemistry	4
CHEM 233	Organic Chemistry	3
CHEM 235	Organic Chemistry Laboratory	1
CS 201	Data Structures	3
CS 221	Analysis of Algorithms	3
CS 222	Intro Software Engineering	3
CS 264	Data Base Management	3
CS 310	Principles of Programming Languages	3
CS 321	Introduction to Networking	3
CS 324	Database Management	3
CS 350	Computer System Concepts	3
CS 410	Compiler Construction	3
CS 450	Operating Systems Structure	3
CS 454	Cryptology	3
CS 456	Digital Image Processing	3
CS 465	Introduction to Cybersecurity	3
CS 470	Introduction to Computer Graphics	3
CS 472	Artificial Intelligence	3
CS 475	Game Development	3
MATH 341	Introduction to Algebraic Structures	3

MATH 378	Discrete Mathematics	3
MATH 381	Introduction to Analysis and Topology	3
MATH 420	Numerical Analysis 1	3
MATH 441	Applied Linear Algebra	3
MATH 448	Probability and Statistics	3
MATH 451	Introduction to Real Analysis 1	3
MATH 452	Introduction to Real Analysis 2	3
MATH 456	Complex Variables	3
MAE 241	Statics	3
MAE 242	Dynamics	3
MAE 243	Mechanics of Materials	3
MAE 320	Thermodynamics	3
MAE 321	Applied Thermodynamics	3
MAE 331	Fluid Mechanics	3
MAE 407	Power Plant Engineering	3
PHYS 314	Introductory Modern Physics	4
Any CPE (Computer Engineering) Course		
Any EE (Electrical Engineering) Course		

Business Technical Electives

No more than one course (3 credits) can be used from this list.

ACCT 201	Principles of Accounting	3
ACCT 202	Principles of Accounting	3
BCOR 350	Principles of Marketing	3
BCOR 360	Supply Chain Management	3
BCOR 370	Managing Individuals and Teams	3
ENTR 201	Business Planning	3
FIN 310	Investments	3
FIN 321	Personal Finance	3
FIN 325	Financial Management 1	3
FIN 326	Financial Management 2	3
FIN 480	International Finance	3
MANG 310	Management of Small Business	3
MANG 350	Leadership In Business	3
MANG 422	The Individual and the Organization	3
MKTG 315	Buyer Behavior	3
MKTG 325	Marketing Research	3
MKTG 485	Global Marketing	3

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
CHEM 115 (GEF 8)	4	ENGR 101	2
CS 112	3	GEF 5	3
WVUE 191	1	GEF 6	3
	15		15

Second Year

Fall	Hours	Spring	Hours
MATH 251	4	MATH 261	4
PHYS 111 (GEF 2)	4	PHYS 112 (GEF 8)	4

EE 200	2	EE 223 & EE 224	4
EE 221 & EE 222	4	CPE 271 & CPE 272	4
GEF 7	3		
	17		16

Third Year

Fall	**Hours**	**Spring**	**Hours**
MATH 448	3	ENGL 305	3
CPE 320 & CPE 321	4	MATH 441	3
EE 327	3	EE 311	1
EE 345	3	EE 329	3
EE 365 & EE 366	4	EE 335 & EE 336	4
	17		14

Fourth Year

Fall	**Hours**	**Spring**	**Hours**
EE 411 & EE 412	4	ECON 401	3
EE 436	3	EE 400	0
EE 461	3	EE 481	3
EE 480	3	EE/CPE Elective	3
EE/CPE Elective	3	Technical Elective	3
		Technical Elective	3
	16		15

Total credit hours: 125

Major Learning Goals

ELECTRICAL ENGINEERING

- **Engineering Science:** Students will attain an ability to apply knowledge of mathematics, science, and engineering.
- **Engineering Experimentation**: Students will attain an ability to design and conduct experiments, as well as to analyze and interpret data.
- **Engineering Design**: Students will attain an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- **Teamwork**: Students will attain an ability to function on multidisciplinary teams.
- **Problem Solving**: Students will attain an ability to identify, formulate, and solve engineering problems.
- **Engineering Ethics**: Students will attain an understanding of professional and ethical responsibility.
- **Effective Communication**: Students will attain an ability to communicate effectively.
- **Impact of Engineering**: Students will attain the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- **Life-long Learning**: Students will attain a recognition of the need for, and an ability to engage in life-long learning.
- **Contemporary Issues**: Students will attain a knowledge of contemporary issues.
- **Modern Tools**: Students will attain an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Electronic Engineering Technology

Degree Awarded

- Bachelor of Science in Electronic Engineering Technology (B.S.E.E.T.)

Nature of Program

The Bachelor of Science in Electronic Engineering Technology program is a plus-two program that builds on two-year Electrical or Electronics Engineering Technology programs. An associate of science degree in Electrical or Electronics Engineering Technology or the equivalent is required for entrance into the program. Graduates of associate of science degree Electrical/Electronic Engineering Technology programs may enter the

program directly as juniors based on an evaluation of their transcripts. In all cases, an evaluation of transfer credits will be conducted to validate course requirements. This evaluation determines if additional lower division courses will be required to meet the prerequisites of upper division courses in the curriculum.

The B.S.E.E.T program is designed to produce applications - oriented graduates with an electronics background to fulfill the demands created by rapidly changing technology. Technical specialty courses in the curriculum emphasize process control, instrumentation, communications, and microprocessor applications. Course offerings are designed to be consistent with the evolution of energy-related and computer-based industrial needs of the state and region.

The Bachelor of Science Electronic Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org.

Careers in Electronic Engineering Technology

The program prepares graduates with the technical and managerial skills necessary to enter careers in the design, application, installation, manufacturing, testing, operation, oversight, and maintenance of electrical or electronic systems. Baccalaureate degree graduates are also prepared for development and implementation of new electrical/electronic systems.

Job titles of recent graduates have included: Electronic Technician, System Representative II, Service Engineer, Engineering Technician, Maintenance Technician, Foreman/Supervisor/ Manager, Electrical Engineer, Sales Engineer, Process Engineer, Design Engineer, Instrumentation Engineer, Control Systems Engineer, Quality Assurance Manager.

Plus-Two Baccalaureate Transfer Options

Students who have completed course work or associate degree programs in engineering-oriented programs at other institutions and wish to continue their studies toward a Bachelor of Science degree in engineering technology may do so. For more information, contact the Chair of the Engineering Technology Department.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

GEF Elective Requirements (5, 6, and 7)		9
ENGL 305	Technical Writing	3
MATH 315	Advanced Technical Mathematics	4
CHEM 115	Fundamentals of Chemistry	4
ECON 202	Principles of Macroeconomics (GEF 4)	3
ELET 315	Electronic Measurement and Instrumentation	4
ELET 337	Communication Systems 2	4
ELET 410	Control Systems Technology	3

ELET 420	Microprocessors and Digital Systems	4
ELET 426	Microprocessor-Based Data Acquisition and Control	4
ELET 436	Programmable Logic Controllers	4
GNET 410	C++ Programming for Technology	3
GNET 412	Project Management	3
GNET 489	Senior Seminar and Project	2
Select one of the following:		3
GNET 311	Software Tools for Engineering Technology	
MANG 386	Business Statistics	
MATH 261	Elementary Differential Equations	
Mathematics (300+ or 400+ level)		
Technical Specialty Electives **		3
Technical Electives **		4
INDT 384	Robotics 1	
MATH 261	Elementary Differential Equations	
MEET 435	Energy Conversion Systems	
Total Hours		64

* All requirements of the General Education Foundations curriculum must be met. Some of these requirements are normally satisfied by courses taken for the AS degree.

** To be approved by advisor. See advisor for approved electives. one technical elective will be selected from the following courses: INDT 384, MATH 261, MEET 435 or any CS 200+ or EE 300+ level course approved by both departments. Exceptions require department chair consent. Other technical specialty electives may be selected from the other ELET courses or courses in other Engineering Technology fields or in engineering fields if prerequisite knowledge is sufficient. A minimum of 40 semester hours of upper division courses is required.

Suggested Plan of Study

Third Year

Fall	Hours	Spring	Hours
CHEM 115	4	ELET 337	4
ECON 202 (GEF 4)	3	ELET 410	3
ENGL 305	3	Select one of the following:	3
ELET 315	4	GNET 311	
MATH 315	4	MANG 386	
		MATH 261	
		Mathematics (300+ or 400+ level)	
		Technical Specialty Elective	3
		GEF 5	3
	18		16

Fourth Year

Fall	Hours	Spring	Hours
ELET 420	4	ELET 426	4
ELET 436	4	GNET 489	2
GNET 410	3	Technical Elective	4
GNET 412	3	GEF 6	3
GEF 7	3		
	17		13

Total credit hours: 64

Major Learning Goals

ELECTRONIC ENGINEERING TECHNOLOGY

Our graduates will be able to:

- Apply principles of mathematics and science to perform technical calculations and solve electronic engineering technology problems.

- Demonstrate the ability to identify, formulate, and present creative solutions to technical problems.
- Perform competently in a laboratory setting.
- Operate modern computational tools for problem solving, including scientific calculators, computers, and appropriate software.
- Demonstrate the ability to communicate and function effectively with member s of multidisciplinary teams.
- Demonstrate a general knowledge of professional ethical responsibility toward employers, customers, and society.
- Recognize the need for obtaining additional education, training, or certification as a means of maintaining and improving the skills necessary for career advancement and personal fulfillment.
- Demonstrate ability to building, operate, test, and maintain electrical/electronic systems while applying skills in circuit analysis and design, computer programming, analog and digital electronics, and microcomputers.
- Apply principles of chemistry and physics along with advanced mathematics for electrical/electronic circuit design and analysis.
- Demonstrate project management techniques on electronic engineering projects.
- Apply principles of advanced mathematics to electrical/electronic systems.
- Demonstrate knowledge of control and instrumentation systems, power systems, communication systems, or computer systems.
- Demonstrate knowledge of the impact of engineering technology solutions in a societal context.
- Apply written, oral, and graphical communication in the class work, and proper use of references.

Engineering Technology

Degree Awarded

- Bachelor of Science in Engineering Technology (B.S.E.T.)

Nature of Program

The Bachelor of Science in Engineering Technology (B.S.E.T.) is a plus-two program that builds on and complements associate degrees earned in a variety of engineering technology areas. The program is unique in its nature and overall design since it provides an opportunity to choose a plan to study toward a baccalaureate degree which best meets the student's needs. Entrance requirements to this program include an associate of science degree in an engineering technology program with appropriate course work, including physical sciences and mathematics (through analytic geometry with calculus).

As students enter the program, an evaluation of their transcript will be made. This evaluation determines if additional lower division courses will be required to meet the prerequisites of the program. Current areas of emphasis are civil, environmental and mechanical engineering technology.

The student, with the assistance and approval of the advisor and Chair of the Engineering Technology department, can select technical specialty elective courses for the program chosen. Selected technical specialty courses can be taken in mechanical, civil, and electrical/electronics engineering technology; as well as industrial technology, and selected engineering courses, depending on the program of study. Also, some mathematics, science, and management courses may be approved.

All students must meet the degree requirements of the institution and the General Education Foundations curriculum for graduation. A minimum of 40 semester hours of upper-division courses is required. If a computer programming course using a technical language has already been completed, a technical elective may be substituted for the C++ programming course.

Plus-Two Baccalaureate Transfer Options

Students who have completed course work or associate degree programs in engineering - oriented programs at other institutions and wish to continue their studies toward a Bachelor of Science degree may do so. Students must satisfy all General Education Foundations and program specific requirements to be eligible for the award of this degree. For more information, contact the Chair of the Engineering Technology Department.

- Civil (p. 144)
- Environmental (p. 145)
- Mechanical (p. 146)

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations	
F1 - Composition & Rhetoric	3-6

ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements - Engineering Technology: Civil

GEF Requirements		6
ENGL 305	Technical Writing	3
GEOL 312	Geology	3
MATH 315	Advanced Technical Mathematics	4
CIET 320	Construction Methods and Equipment	3
CIET 325	Codes, Contracts, and Cost Analysis	3
CIET 330	Computer Applications in Hydraulics and Hydrology	3
CIET 382	Environmental Engineering Technology	3
Select one of the following:		3
CIET 355	Construction Estimating	
MATH 261	Elementary Differential Equations	
MATH 300+ Elective		
Select one of the following:		3
DRET 314	Computer Graphics	
MAE 455	Computer Aided Drafting and Design	
GNET 489	Senior Seminar and Project	2
INDT 302	Industrial Safety	3
Select one of the following:		3
INDT 420	Construction Technology	
CIET 493	Special Topics (Structural Design)	
MEET 316	Dynamics	3
Technical Specialty Electives		15
Advanced CAD Elective		3
Total Hours		63

* All requirements of the General Education Foundations curriculum must be met. Some of these requirements are normally satisfied by courses taken for the AS degree.

** To be approved by advisor. Selected Civil Engineering courses may be taken with the approval of both the advisor and the Chair of Civil Engineering, if prerequisites are met. A minimum of 40 semester hours of upper division courses is required.

Suggested Plan of Study

Third Year

Fall	**Hours**	**Spring**	**Hours**
ENGL 305	3	GEOL 312	3
MATH 315	4	CIET 325	3
CIET 382	3	Select one of the following:	3

MEET 316	3	CIET 355	
Technical Specialty Elective	3	MATH 261	
		MATH 300+ Elective	
		CIET 330	3
		Technical Specialty Elective	3
	16		15

Fourth Year

Fall	Hours	Spring	Hours
GEF 6	3	INDT 420	3
CIET 320	3	GNET 489	2
INDT 302	3	GEF 7	3
DRET 314	3	Technical Specialty Elective	3
Technical Specialty Elective	3	Technical Specialty Elective	3
Advanced CAD Elective	3		
	18		14

Total credit hours: 63

Curriculum Requirements Engineering Technology: Environmental

GEF Requirements		9
BIOL 240	Microbiology	4
CHEM 116	Fundamentals of Chemistry	4
CHEM 215	Introductory Analytical Chemistry	4
ENGL 305	Technical Writing	3
GEOL 312	Geology	3
MATH 315	Advanced Technical Mathematics	4
PHYS 101	Introductory Physics	4
CIET 330	Computer Applications in Hydraulics and Hydrology	3
CIET 325	Codes, Contracts, and Cost Analysis	3
CIET 382	Environmental Engineering Technology	3
CE 425	Engineering Hydology	3
CE 446	Solid Waste Management	3
CHE 201	Material and Energy Balances 1	3
Select one of the following:		3
DRET 314	Computer Graphics	
MAE 455	Computer Aided Drafting and Design	
GNET 412	Project Management	3
GNET 489	Senior Seminar and Project	2
Technical Specialty Electives		9
Total Hours		70

* All requirements of the General Education Foundations curriculum must be met. Some of these requirements are normally satisfied by courses taken for the AS degree.

** To be approved by advisor. See advisor for approved electives. A minimum of 40 semester hours of upper division courses is required.

Suggested Plan of Study

Third Year

Fall	Hours	Spring	Hours
CHEM 116	4	GEF 5	3
PHYS 101	4	GEF 6	3
MATH 315	4	GEOL 312	3
ENGL 305	3	CIET 325	3

CIET 382	3 Technical Specialty Elective	3
	CIET 330	3
	18	18

Fourth Year

Fall	**Hours**	**Spring**	**Hours**
CE 425	3	GEF 7	3
CHE 201	3	Technical Specialty Elective	3
CHEM 215	4	Technical Specialty Elective	3
DRET 314	3	CE 446	3
GNET 412	3	BIOL 240	4
		GNET 489	2
	16		18

Total credit hours: 70

Curriculum Requirements - Engineering Technology: Mechanical

GEF Requirements		12
ENGL 305	Technical Writing	3
Select one of the following:		3
DRET 314	Computer Graphics	
MAE 455	Computer Aided Drafting and Design	
MATH 315	Advanced Technical Mathematics	4
Select one of the following:		3
MAE 242	Dynamics	
MEET 316	Dynamics	
Select one of the following:		3
GNET 308	Advanced Computer Applications	
MANG 386	Business Statistics	
MATH 261	Elementary Differential Equations	
MATH 300+ Elective		
MEET 435	Energy Conversion Systems	3
GNET 410	C++ Programming for Technology	3
GNET 412	Project Management	3
GNET 489	Senior Seminar and Project	2
INDT 308	Automated Manufacturing	3
INDT 354	Industrial Materials	3
INDT 302	Industrial Safety	3
INDT 410	Plant Equipment and Maintenance	3
Technical Specialty Elective		9
Elective		3
Total Hours		63

* All requirements of the General Education Foundations curriculum must be met. Some of these requirements are normally satisfied by courses taken for the AS degree.

** To be approved by advisor. The student's overall program, must include a sequence of courses in at least three of the following areas: manufacturing processes, mechanical design, engineering materials, solid mechanics, fluid mechanics, electro-mechanical devices and controls or industrial operations. MAE courses may be taken with the approval of both the Advisor and the Chair of Mechanical Engineering, if prerequisites are met.

Suggested Plan of Study

Third Year

Fall	**Hours**	**Spring**	**Hours**
DRET 314	3	GEF 7	3

MATH 315	4	Select one of the following:	3
ENGL 305	3	GNET 308	
MEET 316	3	MANG 386	
GNET 412	3	MATH 261	
		MATH 300+ Elective	
		INDT 308	3
		INDT 354	3
		MEET 435	3
	16		15

Fourth Year

Fall	**Hours**	**Spring**	**Hours**
GEF 6	3	GEF 4	3
Elective	3	GEF 5	3
GNET 410	3	INDT 410	3
INDT 302	3	Technical Specialty Elective	3
Technical Specialty Elective	3	Technical Specialty Elective	3
		GNET 489	2
	15		17

Total credit hours: 63

Major Learning Goals

ENGINEERING TECHNOLOGY: CIVIL

PROGRAM OBJECTIVES

Graduates of the BSET-Civil program will be able to achieve the following career and professional accomplishments:

1. Demonstrate an awareness of contemporary social and economic issues, and the relationship of those issues to their professional civil engineering practice.
2. Demonstrate the need to maintain their technical skills and develop new ones through personal development and life-long learning.
3. Capable of conveying technical information through their proficiency in written and spoken communication skills
4. Demonstrate an appreciation and understanding for cultural and ethnic diversity in the workplace.
5. Demonstrate an understanding of professional and ethical responsibilities to their field and to society.
6. Able to acquire and maintain successful employment using their skills in applied civil engineering technology.

STUDENT LEARNING OUTCOMES

Upon completion of the BSET program in Civil Engineering Technology, graduates will be able to:

1. Use appropriate tools to acquire data and analyze problems, including software and lab equipment.
2. Apply the principles of mathematics, science and engineering technology to perform technical calculations and solve for civil engineering technology problems.
3. Perform competently in a laboratory setting.
4. Solve problems and design components, systems or processes appropriate to civil engineering technology.
5. Demonstrate effective skills in the development and presentation of team projects utilizing written, oral and graphical communication skills as well as proper use of references.
6. Function effectively in a team.
7. Generate creative and realistic solutions to defined problems and projects.
8. Exhibit knowledge and skills consistent with expectations of a practicing engineering technologist, including professional development and continuous improvement.
9. Demonstrate a general knowledge of professional and ethical responsibility toward employers, customers, and society.
10. Demonstrate knowledge of the impact of civil engineering technology solutions in a societal context.
11. Utilize computer software to prepare technical reports.
12. Conduct standardized construction/civil engineering materials experiments..
13. Utilize surveying methods for land measurement and/or construction layout.
14. Conduct basic structural analysis including forces and stresses in elementary structural systems.

15. Plan and prepare several engineering management documents, design and construction documents such as specifications, contracts, change orders, engineering drawings, and construction schedules.
16. Perform economic analysis and cost analysis related to design, construction, operations, and maintenance of systems in civil specialties.
17. Select appropriate engineering materials and practices.
18. Perform standard analysis and design in the following sub-discipline: Structures, Geotechnical, construction, transportation, or environmental.

Major Learning Goals

ENGINEERING TECHNOLOGY: ENVIRONMENTAL

Graduates should be able to apply analysis, design, development, implementation and/or oversight of environmental systems and processes using:

1. Technical core topics related to fluids, environmental chemistry and processes, applied thermodynamics, geology and biology.
2. Technical specialty areas of environmental analysis and systems design, physical chemistry, organic chemistry and microbiology.
3. Physics principles having an emphasis in applied mechanics, technical topics in physics/chemistry/biology, and application to environmental systems and processes.
4. Advanced mathematics to solve technical problems.

Major Learning Goals

ENGINEERING TECHNOLOGY: MECHANICAL

PROGRAM OBJECTIVES

Graduates of the BSET-Mechanical program will be able to achieve the following career and professional accomplishments:

1. Demonstrate an awareness of contemporary social and economic issues, and the relationship of those issues to their professional mechanical engineering practice.
2. Demonstrate the need to maintain their technical skills and develop new ones through personal development and life-long learning.
3. Capable of conveying technical information through their proficiency in written and spoken communication skills.
4. Demonstrate an appreciation and understanding for cultural and ethnic diversity in the workplace.
5. Demonstrate an understanding of professional and ethical responsibilities to their field and to society.
6. Able to acquire and maintain successful employment using their skills in applied mechanical engineering technology.

STUDENT LEARNING OUTCOMES

Upon completion of the BSET program in Mechanical Engineering Technology, graduates will be able to:

1. Operate modern computational tools, including computers and machines for technical problem solving.
2. Apply the principles mathematics and science to solve mechanical engineering technology problems.
3. Perform competently in a laboratory setting.
4. Demonstrate ability to design systems, components, or processes for mechanical engineering technology application.
5. Function effectively in a team.
6. Identify and address various aspects of design.
7. Demonstrate competency in written, oral and graphical communication skills.
8. Recognize the need for additional education, training or certification as a means of maintaining and improving the skills necessary for career advancement and personal fulfillment.
9. Demonstrate a general knowledge of professional ethical responsibility toward employers, customers, and society.
10. Exhibit a broad education and knowledge of contemporary issues in a global and societal context.
11. Demonstrate the ability to solve technical problems involving energy, heat transfer, and engineering mechanics.
12. Demonstrate knowledge of plant maintenance, scheduling, and operation as well as safety.
13. Design and build mechanical engineering components using contemporary automated machines.
14. Utilize appropriate software including CAD, to solve mechanical engineering problems.

Industrial Technology

Degree Awarded

- Bachelor of Science

Nature of Program

The Bachelor of Science in Industrial Technology is mainly a plus-two program that builds upon and complements associate degrees earned in industrial technology or similar areas. The program is designed to prepare individuals for a wide range of entry-level industrial positions. The program provides a comprehensive education in technology, supplemented by selected professional, industrial, and related academic studies. The program is designed to prepare graduates with a broad range of knowledge and skills necessary for both lateral and vertical mobility at their workplace.

As a student enters the program, an evaluation of their transcript will be completed. The evaluation will determine if additional lower division courses will be required to meet the prerequisites. All students must meet the General Education Foundations curriculum requirements of the institution for graduation.

Prospective students include graduates of associate degree programs such as:

- Civil Engineering Technology
- Drafting & Design Engineering Technology
- Electrical Engineering Technology
- Mechanical Engineering Technology
- General Studies (with advance approval of program of study by Chair of Engineering Technology)
- Industrial Technology programs at other institutions meeting departmental approval may enter the program directly as juniors based on an evaluation of their transcripts. In all cases, an evaluation of transfer credits will be conducted to validate course requirements. This evaluation determines if additional lower division courses will be required to meet the prerequisites of upper division courses in the curriculum.

Careers in Industrial Technology

Baccalaureate degree graduates are typically involved in the analysis, design, development, implementation, and/or oversight of more advanced systems and processes.

Plus-Two Baccalaureate Transfer Options

Students who have completed course work or associate degree programs in industrial programs at other institutions and wish to continue their studies toward a bachelor of science degree in industrial technology may do so. For more information, contact the Chair of the Engineering Technology Department.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

GEF Requirements		12
WVUE 191	First Year Seminar	1

ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
Select one of the following (GEF 3):		3
MATH 126A	College Algebra 5-Day	
MATH 126B	College Algebra 4-Day	
MATH 126C	College Algebra 3-Day	
MATH 128	Plane Trigonometry (GEF 8)	3
MATH 155	Calculus 1 (GEF 8)	4
CHEM 115	Fundamentals of Chemistry	4
PHYS 101	Introductory Physics (GEF 2)	4
PHYS 102	Introductory Physics (GEF 8)	4
ACCT 201	Principles of Accounting	3
ACCT 202	Principles of Accounting	3
BCOR 320	Legal Environment of Business	3
BCOR 360	Supply Chain Management	3
BCOR 370	Managing Individuals and Teams	3
CS 101	Intro to Computer Applications	4
DRET 120	Drafting 1	2
Select one of the following:		3
DRET 314	Computer Graphics	
MAE 455	Computer Aided Drafting and Design	
ENGR 111	Software Tools for Engineers	3
GNET 412	Project Management	3
GNET 489	Senior Seminar and Project	2
GNET 495	Independent Study	2
INDT 302	Industrial Safety	3
INDT 308	Automated Manufacturing	3
INDT 354	Industrial Materials	3
INDT 410	Plant Equipment and Maintenance	3
INDT 420	Construction Technology	3
MAE 240	Manufacturing Processes	3
Technical Specialty Elective *		18
Technical Elective		6
Total Hours		120

* Subject to approval of the adivsor. Selected engineering courses may be taken with the approval fo the advisor, the Chair of Engineering Technology Department, and the Chair of the engineering department offering the course, if prerequisite material covered is judged to be sufficient.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
WVUE 191	1	ENGR 111	3
DRET 120	2	MATH 128 (GEF 8)	3
Select one of the following (GEF 3):	3	MAE 240	3
MATH 126A		GEF 4	3
MATH 126B			
MATH 126C			
Technical Elective	3		
GEF 5	3		
	15		15

Second Year			
Fall	**Hours**	**Spring**	**Hours**
CS 101	4	DRET 314	3
ACCT 201	3	ACCT 202	3
PHYS 101 (GEF 2)	4	CHEM 115	4
MATH 155 (GEF 8)	4	PHYS 102 (GEF 8)	4
		Technical Elective	3
	15		17
Third Year			
Fall	**Hours**	**Spring**	**Hours**
BCOR 320	3	INDT 308	3
ENGL 305	3	INDT 354	3
INDT 302	3	INDT 420	3
BCOR 370	3	BCOR 360	3
Technical Speciality Elective	3	Technical Speciality Elective	3
	15		15
Fourth Year			
Fall	**Hours**	**Spring**	**Hours**
GNET 412	3	GNET 489	2
GNET 495	2	INDT 410	3
Technical Speciality Elective	3	Technical Speciality Elective	3
Technical Speciality Elective	3	Technical Speciality Elective	3
GEF 6	3	GEF 7	3
	14		14

Total credit hours: 120

Major Learning Goals

INDUSTRIAL TECHNOLOGY

Graduates of the bachelor's degree program in Industrial Technology are prepared for a broad range of technical careers. Graduates apply the technologies of materials, manufacturing processes, automation, CAD/ CAM, production operations, maintenance, power, electro-mechanical systems, industrial organization and management, project management, and safety to the solution of problems in industry.

Information Systems

Degree Awarded

- Bachelor of Science

Nature of Program

The ever increasing use of technology has taken almost every business, non-profit organization, and government agency to a drastically different place from where they were only decades ago. Computers and the Internet have allowed companies to conduct operations, utilize resources, and sell products in almost any area of the world. Information systems specialists analyze the complex operational problems of private and public industry; and design, build, implement, and manage innovative software for improving operations from both a technological and business perspective.

Bachelor of Science in Information Systems (BSIS)

WVU Tech Information Systems program is designed to train highly skilled professionals with expertise in networking, database management, computer systems management, and website development. The program curriculum contains 17 courses taught by Computer Science and Information Systems faculty that are specially developed for Information Systems majors. They include courses such as Database Management, e-Commerce, and Computer Security. Those courses are supplemented by highly specialized Business Management courses such as Visual Basic for Business applications, Business Information Systems, and Business Statistic s. For elective requirements, the department offers a wide variety of courses on computer systems, programming, and special topics such as video game development, artificial intelligence, image processing, and computer graphics. Students have the opportunity to learn more theoretical aspects of computing, other programming languages, advanced programming concepts, or other applications of computing by taking Computer Science electives of their interest.

Program Educational Objectives

In three to five years after graduation, the graduates of the WVU Tech BS degree program in Information Systems will do the following:

- Demonstrate success in the professional practice of Information Systems through recognition of their contributions to an organization or entrepreneurial accomplishments.
- Alternatively or additionally, demonstrate success in the field of computing by continuing formal education through earning post graduate degrees, technical certificates, or other technical training.
- Demonstrate lifelong learning habits either as a professional or a researcher in their field.

FACULTY

CHAIR

- Ranjith Munasinghe - PhD, University of Wyoming

ASSOCIATE PROFESSOR

- Don Smith - MS, University of West Virginia; MA, Marshall University

ASSISTANT PROFESSOR

- Afrin Naz - PhD, University of North Texas
- Stephany Coffman-Wolph - PhD, Western Michigan University
- Sanish Rai - PhD, Georgia State University

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

GEF Elective Requirements (2, 5, 6, 7, and 8)		20
Laboratory Science, GEF 2 and 8 (a total of 8 credit hours required) - Students may select two four-credit-hour BIOL, CHEM, PHSC, or PHYS courses with lab. *		
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
MATH 123	Finite Mathematics 1 (GEF 3)	3
MATH 150	Applied Calculus (GEF 8)	3
WVUE 191	First Year Seminar	1
ACCT 201	Principles of Accounting	3

ECON 202	Principles of Macroeconomics (GEF 4)	3
MANG 386	Business Statistics	3
MANG 420	Business Information Systems	3
A minimum GPA of 2.0 is required in all CS and ISYS courses.		
CS 121	Computer Science 1	4
CS 122	Computer Science 2	4
CS 222	Intro Software Engineering	3
CS 231	Introduction to Computer Organization	3
CS 321	Introduction to Networking	3
CS 324	Database Management	3
CS 365	Computer Languages	1
CS 465	Introduction to Cybersecurity	3
CS 480	Senior Design	2
CS 481	Senior Project	3
CS 491	Professional Field Experience	4
ISYS 101	Introduction to Information Systems 1	3
ISYS 102	Introduction to Information Systems 2	3
ISYS 115	Discrete Structures	3
ISYS 270	Linux	3
ISYS 325	C#	3
ISYS 366	e-Commerce	3
Technical Electives (See approved list)		9
300-400 Level Electives (Students are free to choose any 300-400 college level courses to fulfill this requirement)		6
General Electives (Students are free to choose any college level course to fulfill this requirement)		6
Total Hours		120

* Department approval is required for four-credit-hour courses with laboratory components from other science disciplines.

Approved Technical Electives

Accounting	
ACCT 201	Principles of Accounting
ACCT 202	Principles of Accounting
Biology	
BIOL 111	General Biology **
BIOL 112	General Biology **
Chemistry	
CHEM 111	Survey of Chemistry **
CHEM 112	Survey of Chemistry **
CHEM 115	Fundamentals of Chemistry **
CHEM 116	Fundamentals of Chemistry **
Computer Science	
CS 265	C Programming
CS 300-400 Level *	
Economics	
ECON 201	Principles of Microeconomics
Physical Science	
PHSC 101	Introductory Physical Science 1 **
PHSC 102	Introductory Physical Science 2 **
Physics	
PHYS 101	Introductory Physics **
PHYS 102	Introductory Physics **
PHYS 111	General Physics **

PHYS 112	General Physics **

**** Unless taken as a science requirement**

Other courses are accepted as technical electives only with advance approval from the department. Most of the 300-400 level ACCT, BCOR, BIOL, CHEM, ECON, FINC, MANG, and PHYS courses are considered acceptable.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
MATH 123 (GEF 3)	3	MATH 150 (GEF 8)	3
CS 121	4	CS 122	4
ISYS 101	3	ISYS 102	3
WVUE 191	1	Elective	3
	14		16

Second Year

Fall	Hours	Spring	Hours
ACCT 201	3	ECON 202 (GEF 4)	3
CS 231	3	CS 222	3
ISYS 115	3	CS 324	3
Elective	3	ISYS 270	3
GEF 5	3	GEF 6	3
	15		15

Third Year

Fall	Hours	Spring	Hours
CS 321	3	ENGL 305	3
ISYS 325	3	CS 365	1
MANG 386	3	ISYS 366	3
Technical Elective	3	Laboratory Science	4
GEF 2	4	GEF 8	3
	16		14

Fourth Year

Fall	Hours	Spring	Hours
CS 480	2	CS 465	3
MANG 420	3	CS 481	3
300-400 Level Elective	3	CS 491	4
Technical Elective	3	300-400 Level Elective	3
GEF 7	3	Technical Elective	3
	14		16

Total credit hours: 120

Major Learning Goals

INFORMATION SYSTEMS

The BS degree in Information Systems at WVU Tech enables students to attain:

- An ability to apply knowledge of computing and mathematics appropriate to the program’s student outcomes and to the discipline.
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.
- An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- An ability to function effectively on teams to accomplish a common goal.
- An understanding of professional, ethical, legal, security and social issues and responsibilities.
- An ability to communicate effectively with a range of audiences.
- An ability to analyze the local and global impact of computing on individuals, organizations, and society.
- Recognition of the need for and an ability to engage in continuing professional development.

- An ability to use current techniques, skills, and tools necessary for computing practice.
- An understanding of processes that support the delivery and management of information systems within a specific application environment.

Department of Computer Science and Information Systems Minor

COMPUTER SCIENCE

MINOR CODE - UT24

Student must earn a grade of C or better for each of the courses counted towards the minor.

Required Courses		
CS 121	Computer Science 1	4
CS 122	Computer Science 2	4
Complete the requirements for one of the following tracks:		8-9
Programming Track		
CS 201	Data Structures	
CS 222	Intro Software Engineering	
CS 310	Principles of Programming Languages	
Systems Track		
CS 231	Introduction to Computer Organization	
CS 265	C Programming	
CS 350	Computer System Concepts	
Select two of the following courses:		6
CS 321	Introduction to Networking	
CS 324	Database Management	
CS 410	Compiler Construction	
CS 450	Operating Systems Structure	
CS 465	Introduction to Cybersecurity	
CS 472	Artificial Intelligence	
Total Hours		22-23

Mathematics

Degree Awarded

- Bachelor of Science

Nature of Program

Mathematics is the foundation for many of the natural sciences and, as knowledge is expanded in these sciences, new demands are made on mathematics to provide ideas to be used in advancing the sciences. Older sciences such as physics, chemistry, and engineering depend on mathematics, as do a large number of new and sophisticated subjects. The student's career in mathematics might include college teaching and research, computers, statistics, and many others.

Program Objectives

The graduates of the Mathematics program:

- Should be able to attend graduate school or find employment in industry or government.
- Will have a rounded education that encourages and supports meaningful dialogue with individuals from other disciplines especially sciences and engineering.
- Will be prepared to participate in lifelong learning opportunities.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations

F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements for Classic Track

GEF Requirements		15
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
WVUE 191	First Year Seminar	1
A minimum GPA of a 2.0 is required in all major coursework		
ENGL 305	Technical Writing	3
PHYS 111	General Physics (GEF 2)	4
MATH 155	Calculus 1 (GEF 3)	4
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
MATH 283	Introduction to the Concepts of Mathematics	3
MATH 341	Introduction to Algebraic Structures	3
MATH 441	Applied Linear Algebra	3
MATH 448	Probability and Statistics	3
MATH 451	Introduction to Real Analysis 1	3
MATH 452	Introduction to Real Analysis 2	3
MATH 496	Senior Thesis	2
CS 121	Computer Science 1	4
CS 122	Computer Science 2	4
MATH Elective (300+ or 400+ level; except MATH 315)		6
Technical Elective		16
Elective		25
Total Hours		120

Technical Electives

BIOL 111	General Biology	4
BIOL 112	General Biology	4
BIOL 230	Human Anatomy and Physiology 1	4
BIOL 231	Human Anatomy and Physiology 2	4
BIOL 240	Microbiology	4
CE 204	Surveying	3
CHE 201	Material and Energy Balances 1	3
CHE 202	Material and Energy Balances 2	3
CHEM 111	Survey of Chemistry	4
CHEM 112	Survey of Chemistry	4

CHEM 115	Fundamentals of Chemistry	4
CHEM 116	Fundamentals of Chemistry	4
CPE 271	Introduction to Digital Logic Design	3
CPE 272	Digital Logic Laboratory	1
CS 201	Data Structures	3
CS 222	Intro Software Engineering	3
CS 231	Introduction to Computer Organization	3
EE 221	Introduction to Electrical Engineering	3
EE 222	Introduction to Electrical Engineering Laboratory	1
EE 223	Electrical Circuits	3
MAE 240	Manufacturing Processes	3
MAE 241	Statics	3
MAE 242	Dynamics	3
MAE 243	Mechanics of Materials	3
MAE 320	Thermodynamics	3
PHYS 112	General Physics	4
Any BIOL 300-400 Level Course		
Any CHE 300-400 Level Course		
Any CHEM 300-400 Level Course		
Any CE 300-400 Level Course		
Any CS 300-400 Level Course		
Any CPE 300-400 Level Course		
Any EE 300-400 Level Course		
Any ENGR 300-400 Level Course		
Any MATH 300-400 Level Course (except MATH 315)		
Any MAE 300-400 Level Course		
Any PHYS 300-400 Level Course		

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
WVUE 191	1	MATH 156 (GEF 8)	4
MATH 155 (GEF 3)	4	CS 122	4
CS 121	4	GEF 4	3
Elective	3	Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
MATH 283	3	MATH 261	4
MATH 251	4	MATH Elective (300-400 level)	3
PHYS 111 (GEF 2)	4	Technical Elective (GEF 8)	4
GEF 5	3	Elective	3
		Elective	3
	14		17

Third Year

Fall	Hours	Spring	Hours
ENGL 305	3	MATH 341	3
MATH 448	3	MATH 441	3
GEF 6	3	Technical Elective	3
Technical Elective	3	GEF 7	3

Elective	3 Elective	3
	15	15

Fourth Year

Fall	**Hours**	**Spring**	**Hours**
MATH 451	3	MATH 452	3
MATH Elective (300-400 level)	3	MATH 496	2
Technical Elective	3	Technical Elective	3
GEF 8	3	Elective	3
Elective	3	Elective	3
	15		14

Total credit hours: 120

Major Learning Goals

MATHEMATICS

The graduates of the Mathematics program:

- Will be critical thinkers and problem solvers.
- Will be able to understand the concepts, solve the problems, and prove theorems in at least three of the four major areas of mathematics - Algebra, Analysis, Applied Mathematics, and Geometry/Topology.
- Will be able to develop computer programs to implement computational algorithms.
- Will be able to communicate effectively.

Department of Mathematics Minor

MATHEMATICS

MINOR CODE - UT14

Required Courses		
MATH 155	Calculus 1	4
MATH 156	Calculus 2	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
MATH 441	Applied Linear Algebra	3
Select two of the following courses:		6
MATH 283	Introduction to the Concepts of Mathematics	
MATH 300+ or 400+ Level Courses (excluding MATH 315)		
Total Hours		25

Mechanical Engineering

Degree Awarded

- Bachelor of Science in Mechanical Engineering

Nature of Program

Mechanical engineering is one of the largest technical professions with a history of significant contributions to industrial development since the dawn of human civilization. The history of technology is replete with stories of successful applications of ideas and concepts from mechanical engineering that have brought tremendous prosperity to industrialized nations starting with the industrial revolution. Mechanical engineers also play a vital role in maintaining leadership in technology to insure the survival and growth of an industrialized society.

In order to prepare students for the challenges awaiting them in the real world, the Mechanical Engineering Department at WVU Tech offers a practice-oriented education with strong emphasis on hands-on experience at all levels of its BSME program. The curriculum is designed to develop the skills necessary to succeed in a field that is both challenging and rewarding. The Mechanical Engineering Program includes sequential courses in several areas, such as English, mathematics, chemistry, physics, humanities, computer science, general engineering science and foundation courses in mechanical engineering such as thermodynamics, machine design, heat transfer, mechanical vibrations, control systems and materials science. Technical electives in thermal and mechanical systems are included in the program to enable graduates to pursue special areas of interest.

Practicing mechanical engineers consider these courses as essential for a sound mechanical engineering curriculum. They are also mandated by the ABET, the national organization that accredits engineering programs in the United States. The Mechanical Engineering curriculum is designed to include meaningful design experience in several of the required and elective courses. Students develop analytical and design skills systematically by successfully completing sequential courses such as Statics, Dynamics, Mechanics of Materials, Dynamics of Machines, Machine Design and Systems Design I and II. Open - ended, multiple - solution design concept is incorporated across the curriculum starting with Mechanics of Materials in their sophomore year and ending with two capstone design courses during their senior year. In the capstone design courses, students learn how to apply the previously acquired knowledge in science, technology, humanities, communications, ethics, economics, etc.

The Mechanical Engineering faculty also recognize s the dynamic nature of modern technology in which advances are inevitable and the need for our students to be prepared to meet these challenges. The curriculum is therefore under constant review, and changes are introduced in response to the changing needs of industry and the job market.

Departmental Mission

The mission of the Mechanical Engineering Department at WVU Tech is to produce high quality mechanical engineers with the best possible education that will enable them to become competent members of the profession able to handle the most challenging jobs. The Mechanical Engineering Department intends to fulfill this mission by maintaining high academic quality that insures continued ABET accreditation.

Departmental Goals

The Mechanical Engineering faculty is committed to the following goals:

- Provide an atmosphere of dedicated teaching and support services to the students with the best possible classroom instructions, counseling, academic planning, career guidance and personal attention to facilitate growth and success in academic and professional work.
- Provide quality learning tools and an academic environment that produces technically competent mechanical engineers who are able to meet the needs of employers from government, industry and business.
- Encourage and nurture students' interest in engineering as a profession.
- Help students develop self-motivation, good work habits, personal discipline, and the skills needed to be a professionally successful member of society.

Educational Objectives

The following Educational Objectives have been adopted by the faculty of the Mechanical Engineering Department. Graduates of the WVU Tech Mechanical Engineering program:

- Are successful in the practice of mechanical engineering.
- Advance to positions of technical and/or managerial leadership.
- Are successful in graduate studies, if they choose to pursue advanced education.
- Are able to obtain professional registration, if they choose to, after appropriate professional experience.
- Are dedicated to life-long learning in their professional career.

Assessment

The Mechanical Engineering Program at WVU Tech has a multi-faceted assessment process in place which includes: students' classwork and portfolios such as design projects; course evaluations; faculty evaluations; exit surveys of graduating seniors; alumni surveys; advisory board surveys; employer surveys; placement data of graduates; and the results of the Fundamentals of Engineering (FE) Examination. The feedback from these sources is continuously used by the Mechanical Engineering faculty to update the curriculum and to make the changes necessary to maintain or enhance the quality of the program.

GENERAL EDUCATION FOUNDATIONS

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or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4

F4 - Society & Connections	3
F5 - Human Inquiry & the Past	3
F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

WVUE 191	First Year Seminar	1
DRET 120	Drafting 1	2
GEF Elective Requirements (5, 6, and 7)		9
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
ENGL 305	Technical Writing	3
MATH 155	Calculus 1 (GEF 3)	4
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
CHEM 115	Fundamentals of Chemistry (GEF 8)	4
PHYS 111	General Physics (GEF 2)	4
PHYS 112	General Physics (GEF 8)	4
ECON 401	Managerial Economics (GEF 4)	3
EE 221 & EE 222	Introduction to Electrical Engineering and Introduction to Electrical Engineering Laboratory	4
ENGR 111	Software Tools for Engineers	3
ENGR 401	Senior Engineering Seminar	1
MAE 201	Applied Engineering Analysis	3
MAE 240	Manufacturing Processes	3
MAE 241	Statics	3
MAE 242	Dynamics	3
MAE 243	Mechanics of Materials	3
MAE 320	Thermodynamics	3
MAE 321	Applied Thermodynamics	3
MAE 331	Fluid Mechanics	3
MAE 332	Experimental Methods	1
MAE 333	Mechanical Measurements	1
MAE 340	Vibrations	3
MAE 342	Dynamics of Machines	3
MAE 405	Senior Mechanical Engineering Lab	1
MAE 410	Materials Science (GEF 2)	4
MAE 419	Heat Transfer Lab	1
MAE 423	Heat Transfer	3
MAE 454	Machine Design and Manufacturing	3
MAE 455	Computer Aided Drafting and Design	3
MAE 456	Computer-Aided Design and Finite Element Analysis	3
MAE 460	Automatic Controls	3
MAE 480	System Design 1	3
MAE 481	Systems Design 2	3

Technical Electives (see below)	6
Total Hours	125

Technical Electives

Mechanical, Structural, and Energy Oriented		
MAE 407	Power Plant Engineering	3
MAE 425	Internal Combustion Engines	3
MAE 427	Heating, Ventilating, and Air Conditioning	3
MAE 428	Aerodynamics	3
MAE 429	Theory of Turbomachines	3
MAE 440	Industrial Hydraulics:Components and Circuits Design	3
MAE 463	Advanced Machine Design	3
MAE 493	Special Topics (Applied Computational Fluid Dynamics)	1-6
CE 361	Structural Analysis 1	4
CE 421	Hydraulic Engineering	4
EE 427	Introduction to Robotics	3
EE 335 & EE 336	Electromechanical Energy Conversion and Systems and Electromechanical Energy Conversion and Systems Lab	4
Digital Hardware and Software Oriented		
ENGR 493	Special Topics (Microprocessors for Non-Electrical Engineers/Comp. Engineers)	1-6
CPE 271 & CPE 272	Introduction to Digital Logic Design and Digital Logic Laboratory	4
CS 112	Computer Science - Engineers 1	3
GNET 410	C++ Programming for Technology	3
ISYS 102	Introduction to Information Systems 2	3
CS 121 & CS 122	Computer Science 1 and Computer Science 2	8
Manufacturing Oriented		
DRET 314	Computer Graphics	3
ELET 436	Programmable Logic Controllers	4
INDT 302	Industrial Safety	3
INDT 308	Automated Manufacturing	3
INDT 410	Plant Equipment and Maintenance	3
Math Oriented		
MATH 378	Discrete Mathematics	3
MATH 441	Applied Linear Algebra	3
MATH 448	Probability and Statistics	3
Biomechanics Oriented		
BIOL 230	Human Anatomy and Physiology 1	4
BIOL 440	Comparative Anatomy	4

Suggested Plan of Study

First Year

Fall	**Hours**	**Spring**	**Hours**
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
CHEM 115 (GEF 8)	4	ENGR 111	3
DRET 120	2	MAE 241	3
WVUE 191	1	GEF 5	3
	14		16

Second Year

Fall	Hours	Spring	Hours
MATH 251	4	MATH 261	4
PHYS 111 (GEF 2)	4	PHYS 112 (GEF 8)	4
MAE 240	3	MAE 201	3
MAE 242	3	MAE 320	3
MAE 243	3	MAE 331	3
	17		17

Third Year

Fall	Hours	Spring	Hours
EE 221 & EE 222	4	ENGL 305	3
MAE 321	3	ECON 401 (GEF 4)	3
MAE 333	1	MAE 332	1
MAE 342	3	MAE 340	3
MAE 480	3	MAE 419	1
		MAE 423	3
		MAE 460	3
	14		17

Fourth Year

Fall	Hours	Spring	Hours
MAE 405	1	ENGR 401	1
MAE 455	3	MAE 410 (GEF 2)	4
MAE 480	3	MAE 456	3
Technical Elective	3	MAE 481	3
GEF 6	3	Technical Elective	3
GEF 7	3		
	16		14

Total credit hours: 125

Major Learning Goals

MECHANICAL ENGINEERING

Consistent with the mission of WVU Tech and in compliance with the ABET criteria, the Program emphasizes the development of a well-rounded mechanical engineer. Upon graduation they will be able to demonstrate:

- an ability to apply knowledge of mathematics, science, and engineering
- an ability to design and conduct experiments,as well as to analyze and interpret data
- an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- an ability to function on multidisciplinary teams
- an ability to identify, formulate, and solve engineering problems
- an understanding of professional and ethical responsibility
- an ability to communicate effectively
- the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- a recognition of the need for, and an ability to engage in life-long learning
- a knowledge of contemporary issues
- an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Department of Nursing

Degree Awarded

- Bachelor of Science in Nursing

Nature of Program

The mission of the WVU School of Nursing is to lead in improving health in West Virginia and society in general, through excellence in student - centered educational programs, research and scholarship, the compassionate practice of nursing, and service to the public and the profession. This mission is responsive to changing healthcare needs and emerging national and state changes in technology and healthcare delivery and is enhanced by a supportive and open environment. The faculty's educational effort is directed at providing high quality, student - centered programs of instruction at all levels which prepare superb professional nurses to meet basic healthcare needs. The curriculum includes courses in the humanities, social sciences, basic sciences, and nursing science. These courses are taken in conjunction with nursing clinical courses that enable students to apply their learning to actual client, family, and community situations that warrant nursing intervention. The curriculum has been carefully designed to equip graduates to begin professional nursing practice with patients of all ages in any health care setting where there is a position for a professional nurse at the start of his or her career. The program also provides an excellent foundation for graduate study in nursing and in other fields. The program is fully accredited by the Commission of Collegiate Nursing Education of the American Association of Colleges of Nursing. Students graduating from the program are eligible to take the licensure exam for registered professional nurses (NCLEX) in West Virginia and all other states.

On the WVUIT campus there are two options:

1. Basic BSN students are admitted to the WVUIT Department of Nursing at either the freshman level or the sophomore level after completing pre - requisite general education requirements. While freshman level general education requirements are generally completed at WVUIT, students may complete these courses at other accredited institutions and transfer to WVUIT upon admission to the BSN program.
2. The joint program between WVU School of Nursing/Glenville State College/and WVUIT is a program whereby students complete the first one year of study on the Glenville campus and then in the spring apply to WVUIT to be admitted as sophomores to complete the nursing courses.

ADMINISTRATION

CHAIR

- Crystal Sheaves - Ph.D.
  West Virginia University

FACULTY

SENIOR LECTURER

- Amy Bruce - MSN
  Marshall University
- Barbara Douglas - MSN
  Wright State University
- Mindy Harris - MSN
  Marshall University
- James Messer - MSN
  University of Phoenix
- Robin Spencer - MSN
  Marshall University
- Melinda Stoecklin - MSN
  Marshall University

LECTURERS

- Kelly Morton - MSN
  Capella University
- Hillary Parcell - MSN
  Marshall University

Admission Requirements

HIGH SCHOOL SENIORS

Candidates who are selected for the limited number of openings in the nursing program must meet the admission requirements of the WVU School of Nursing. Admission is on a competitive basis. Individuals who have a felony or serious misdemeanor conviction are NOT guaranteed entrance to health agencies for clinical experiences and are not guaranteed to be approved by the West Virginia Board of Examiners for Registered Professional Nurses to take the National Council for Licensure Examination for Registered Nurses (NCLEX). If felony convictions or serious misdemeanors preclude participation in clinical rotations, this could, in turn, prevent the completion of clinical course requirements, and completion of the nursing program.

Applicants are eligible to enter the BSN Program as freshmen. Admission is based on a combination of high school grade point average and composite ACT or total SAT scores. **Students admitted directly into the nursing major as freshmen until the end of summer session of the freshman year to complete the required freshman course work.**

High school students eligible for admission to the University are admitted directly into nursing if they meet the following criteria:

- **GPA of 3.8 or higher and an ACT composite score of 26 with Math of 22 or SAT score of 1190 Combined Critical Reading and Math or 1260 Combined EBRW and Math with 540/570 Math score**
- **GPA of 3.6-3.79 and an ACT composite score of 28 with Math of 22 or SAT score of 1260 Combined Critical Reading and Math or 1320 Combined EBRW and Math and 540/570 Math Score**

Students admitted directly to the Nursing program must maintain a 3.0 GPA throughout the nursing program, beginning with the first semester at WVU. If a student's GPA falls below 3.0, he/she will be placed on probation for one semester. If the student's GPA remains below 3.0 for a second semester, the student will be dismissed from the nursing program. ***Directly admitted students must complete all prerequisite freshman courses in the Progression plan with a grade of "C" or better by the end of summer session of the freshman year. If required courses are not completed satisfactorily by that time, the student will be moved to "Pre-Nursing" status and will be required to reapply for admission to the School of Nursing.***

High school students not eligible for direct admission but wishing to enter WVU Tech with pre-nursing status will need to have the following requirements:

- **GPA of 3.2 or higher and an ACT composite score of 23 and Math of 22 or SAT score of 1070 Combined Critical Reading and Math or 1140 Combined EBRW and Math and 540/570 Math Score**

Students admitted to the program as "Pre-Nursing" must maintain a 2.5 GPA beginning with the first semester at WVU. If a student's GPA falls below 2.5, he/she will be placed on probation for one semester. If the student's GPA remains below 2.5 for a second semester, the student will be dismissed from "Pre-Nursing".

COLLEGE STUDENTS

High school students not eligible for direct admission and college students from other majors may apply for admission after one semester or more of college course work. Admission consideration in this case is dependent upon:

- **Minimum cumulative GPA of at least 3.0 on a 4.0 scale on all college work attempted**
- **Minimum cumulative GPA of 3.0 on a 4.0 scale for the pre-requisite courses**
- **Completion of each of the pre-requisite courses with a grade of "C" or better prior to enrollment**

Prerequisites: English Composition (3 cr.), Introduction to Psychology (3 cr.), Introduction to Nursing (2 cr.), College Algebra (3 cr.), Chemistry with lab (8 cr.), General Biology with lab (4 cr.), Anatomy and Physiology (4 cr.). Statistics is in the freshman progression plan but i s not a pre - requisite for admission to sophomore year. Introduction to Human Development and Nutrition, and Intro to Anthropology are no longer pre - requisites and are taken later in the program

Complete Nursing applications including transcripts must be received by **February 1** of the year the candidate wishes to be admitted. Spaces are limited and the most qualified applicants are admitted. **Preference will be given to applicants who have completed or are enrolled in the nursing pre-requisite courses at the time of admission.** Applicants will be admitted to the fall semester and must have and maintain a 3.0 total GPA and 3.0 pre-requisite GPA as a provision of their admission.

Online Nursing Application is open from December 15 to February 1 at https://intraweb.wvutech.edu/nursing/nursing-application.php.

GENERAL EDUCATION FOUNDATIONS

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations

F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

A minimum grade of C- is required in all coursework except GEF 5 and GEF 6

GEF Elective Requirements (5 and 6)		6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
Select one of the following (GEF 3):		3
MATH 126A	College Algebra 5-Day	
MATH 126B	College Algebra 4-Day	
MATH 126C	College Algebra 3-Day	
STAT 211	Elementary Statistical Inference	3
BIOL 111	General Biology	4
BIOL 230	Human Anatomy and Physiology 1	4
BIOL 231	Human Anatomy and Physiology 2	4
BIOL 240	Microbiology	4
CHEM 111	Survey of Chemistry (GEF 2)	4
CHEM 112	Survey of Chemistry	4
HLSC 104	Nutrition	3
PSYC 101	Introduction to Psychology (GEF 4)	3
PSYC 241	Introduction to Human Development	3
SOCA 105	Introduction to Anthropology (GEF 7)	3
NSG 100	Introduction to Nursing	2
NSG 211	Health Assessment & Communication	6
NSG 212	Foundations of Nursing Practice	6
NSG 276	Evidence Based Practice and Research	3
NSG 310	Maternal Infant Nursing & Women's Health Care	4
NSG 311	Alterations in Adult Health 1	6
NSG 312	Alterations in Adult Health 2	6
NSG 320	Child and Adolescent Health	4
NSG 360	Ethics and Health Policy	3
NSG 376	Clinical Nursing Pharmacology	3
NSG 411	Nursing in Complex Community Systems	7
NSG 412	Leadership in Complex Systems	7
NSG 450	Alterations in Mental Health	4
NSG 460	Care of the Critically Ill Patient	4
NSG 486	NCLEX Review	1
WVUE 191	First Year Seminar	1
Nursing Electives		2

NSG 400	Spirituality and Health
NSG 480	Core Concepts in Gerontological Nursing
NSG 481	Cardiac Nursing
NSG 482	Palliative Care Nursing
NSG 483	Holistic and Integrative Nursing
NSG 484	Care of the Diabetic Patient
NSG 485	Children With Complex Health Needs
NSG 487	Movies and Mental Health
NSG 488	Generics/Genomics in Health
Total Hours	123

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BIOL 111	4	ENGL 101 (GEF 1)	3
CHEM 111 (GEF 2)	4	STAT 211	3
Select one of the following (GEF 3):	3	BIOL 230	4
MATH 126A		CHEM 112	4
MATH 126B		NSG 100	2
MATH 126C			
PSYC 101 (GEF 4)	3		
WVUE 191	1		
	15		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	BIOL 240	4
BIOL 231	4	PSYC 241	3
HLSC 104	3	NSG 212	6
NSG 211	6	NSG 376	3
	16		16

Third Year

Fall	Hours	Spring	Hours
SOCA 105 (GEF 7)	3	NSG 312	6
NSG 276	3	NSG 320	4
NSG 310	4	NSG 360	3
NSG 311	6	GEF 6	3
	16		16

Fourth Year

Fall	Hours	Spring	Hours
NSG 411	7	NSG 412	7
NSG 450	4	NSG 460	4
Nursing Elective	2	NSG 486	1
GEF 5	3		
	16		12

Total credit hours: 123

Major Learning Goals

BACHELOR OF SCIENCE IN NURSING

CRITICAL THINKING: Employ scholarly inquiry and evidence-based reasoning and creativity in the process of assessment, interpretation, analysis, synthesis, evaluation, and inference as a basis for professional nursing practice.

NURSING INTERVENTIONS: Ensure quality care by applying theory, evidence-based clinical judgment and decision-making, and patient care technology in the delivery of safe and skilled nursing therapeutics with individuals, families, communities, and populations across the health-illness continuum.

PROFESSIONAL ROLE: Demonstrate knowledge, attitudes, professional values, personal qualities and behaviors consistent with the nursing roles of health care designer and coordinator, organization and system leader, and advocate for consumers and the nursing profession.

CARING: Provide empathetic, culturally sensitive, and compassionate care for individuals, families, communities, and populations that upholds moral, legal, and ethical humanistic principles.

COMMUNICATION: Integrate therapeutic, interpersonal, intraprofessional, interprofessional and informatics communication processes in professional nursing practice.

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