

Bachelor of Science in Architectural Engineering

Worksheet

Architectural Engineering Courses (67 credits)

<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Contact Hours</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/> CVL 203	Principles and Practice of Geomatics	4	ConP: CGT 164	Lect.: 3h Lab.: 2h			
<input type="checkbox"/> CVL 231	Engineering Materials I	3	Pre: CVL 297 or CVL 250 or ME 271 or ME 270 or ME 250 or CVL 271 (all with Min. Grade of C-)	Lect.: 3h Lab.: 2h			
<input type="checkbox"/> CVL 270	Introductory Structural Mechanics	4	Pre: CVL 297 or ME 270 or ME 271 or ME 250 or CVL 250 or CE 271 (all with Min. Grade of C-) ConP: CVL 231 with Minimum Grade of C-	Lect.: 3h Lab.: 2h			
<input type="checkbox"/> CVL 292	Contemporary Issues In Civil Engineering	2	Sophomore	Lect.: 2h			
<input type="checkbox"/> CVL 297	Basic Mechanics I (Statics)	3	Pre: PHYS 172 ConP: MA 261	Lect.: 3h			
<input type="checkbox"/> CVL 341	Hydraulics, hydrology and Drainage	3	MA 166	Lect.: 3h			
<input type="checkbox"/> CVL 343	Elementary Hydraulics Laboratory	1	ConP: CVL 340 or CVL 341 (all with min. grade C-)	Lab.: 3h			
<input type="checkbox"/> CVL 398	Introduction to Civil Engineering System Design	3	Pre: MA 261	Lect.: 3h			
<input type="checkbox"/> AE 200	Thermal and Energy Science	3	PHYS 172	Lect.: 3h			
<input type="checkbox"/> AE 310	Architecture and Building Information Modeling	3	Sophomore Standing in Engineering and CGT 164	Lect.: 3h Lab.: 2h			
<input type="checkbox"/> AE 311	Architectural Engineering	3	Pre: AE 200 with min. grade C-	Lect.: 3h			
<input type="checkbox"/> AE 413	Building Envelope Design and Thermal Loads	3	Pre: AE 311 with min. grade C-	Lect.: 3h Lab.: 1h			
<input type="checkbox"/> AE 414	Building Mechanical and Electrical Systems	3	Pre: AE 311 with min. grade C-	Lect.: 3h Lab.: 1h			
<input type="checkbox"/> AE 415	Engineering Acoustics	3	Pre: AE 311 with min. grade C-	Lect.: 3h			
<input type="checkbox"/> AE 498	Senior Design	3	Last semester only. If last semester is summer, then to be taken in preceding Spring	Lect.: 1h Lab.: 2h			

<input type="checkbox"/>	AE 513	Lighting in Buildings	3	AE 311 with min. grade C-; ConP: AE 413 with min. grade C-	Lect.: 3h Lab.: 1h			
<input type="checkbox"/>	AE 514	Building Controls	3	AE 414, AE 413 (all with min. grade C-)	Lect.: 3h Lab.: 1h			
<input type="checkbox"/>	AE 515	Building Energy Audits	3	AE 311 with min. grade C-; ConP: AE 413 with min. grade C-	Lect.: 3h			
<input type="checkbox"/>	AE 516	Sustainable Building Modeling and Operation	3	AE 413, AE 414 (all with min. grade C-)	Lect.: 3h			
<input type="checkbox"/>	AE 522	Indoor Environment	3	AE 311 with min. grade C-	Lect.: 3h			
<input type="checkbox"/>	LA250	Architectural Design	3	AD 454	Lect.: 2h Lab.: 4h			
<input type="checkbox"/>	LA 255	Architectural Design II	3	LA 250 ConP: AE 310 with min. grade C-	Lect.: 2h Lab.: 4h			
<input type="checkbox"/>	BCM 250	Construction Project And Administrative Management	2	-	Lect.: 2h			

Architectural Engineering Credits Planned: _____ Credits Completed: _____ Credits Remaining: _____

General Engineering Requirements (6 credits)

<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Reg, ConP</u>	<u>Contact Hours</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/>	ENGR 131	Transforming Ideas to Innovation I	2	-	Lect.: 2h Lab.: 2h		
<input type="checkbox"/>	ENGR 132	Transforming Ideas to Innovation II	2	Pre: ENGR 131	Lect.: 2h Lab.: 2h		
<input type="checkbox"/>	CGT 164	Graphics for Civil Engineering and Construction	2	-	Lect.: 2h Lab.:2h		

General Engineering Credits Planned: _____ Credits Completed: _____ Credits Remaining: _____

Mathematics and Science Courses (38 credits)

Quantitative Methods (21 credits)

	<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Contact Hours</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/>	MA 165	Analytic Geometry And Calculus I	4	Passing Math Placement Test or MAT 110	Lect.: 3h; PS: 2h			
<input type="checkbox"/>	MA 166	Analytic Geometry And Calculus II	4	Pre: MA 165	Lect.: 4h			
<input type="checkbox"/>	MA 261	Multivariate Calculus	4	Pre: MA 166	Lect.: 4h			
<input type="checkbox"/>	MA 265	Linear Algebra	3	Pre: MA 166	Lect.: 3h			
<input type="checkbox"/>	MA 266	Ordinary Differential Equations	3	Pre: MA 261	Lect.: 3h			
<input type="checkbox"/>	STAT 511	Statistical Methods	3	Pre: MA 166	Lect.: 3h			

Quantitative Methods Credits Planned: _____ Credits Completed: _____ Credits Remaining: _____

Sciences (11 credits)

	<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Contact Hours</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/>	CHM 115	General Chemistry	4	ConP: MA 165	Lect.: 3h; Lab.: 2h			
<input type="checkbox"/>	PHYS 172	Modern Mechanics + Lab	4	ConP: MA 165	Lect.: 3h; Lab.: 2h			
<input type="checkbox"/>	PHYS 241	Electricity and Optics	3	Pre: PHYS 172	Lect.: 3h			

Science Credits Planned: _____ Credits Completed: _____ Credits Remaining: _____

Basic Science Selective (3-4 credits):

<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Contact Hours</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
Student has to choose from the list provided in the Degree Requirements							
<input type="checkbox"/>							
<input type="checkbox"/>							

Basic Science Credits Planned: _____ Credits Completed: _____ Credits Remaining: _____

Science Selective (3-4 credits):

<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Contact Hours</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/>							

Science Selective Credits Planned: _____ Credits Completed: _____ Credits Remaining: _____

Technical Electives (6 credits):

Refer to Technical Elective Requirements for Architectural Engineering Students and AUM Course Catalogue

<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Contact Hours</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/>							
<input type="checkbox"/>							

Technical Electives Credits Planned: _____ Credits Completed: _____ Credits Remaining: _____

Liberal Arts Requirements (19 credits)

Refer to the Liberal Arts Department Course Catalogue

English Language and Communication Skills (10 credits).

	<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Contact Hours</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/>	ENGL 100	English for Academic Studies	3	-	Lect.: 3h			
<input type="checkbox"/>	ENGL 106	First-Year Composition	4	Pre: ENGL 100	Lect.: 4h			
<input type="checkbox"/>	COM 114	Fundamentals Of Speech Communication	3	Pre: ENGL 100	Lect.: 3h			

English Language and Communication Credits Planned: _____ Credits Completed: _____ Credits Remaining: _____

General Education Electives (9 credits):

	<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Contact Hours</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/>	AD 454	Modern Architecture	3	ConP: ENGL 100	Lect.: 3h			
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								

Liberal Arts Credits Planned: _____ Credits Completed: _____ Credits Remaining: _____

Minimum Total Credits Required for Degree: 136

Total Credits Planned: _____

Total Credits Completed: _____

Total Credits Remaining: _____