

Bachelor of Science in Mechanical Engineering

3.4.3 Worksheet

Mechanical Engineering (ME) Requirements (at least 62 credit hours)

Mechanical Sciences (12 credit hours)

	<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/>	ME 270	Basic Mechanics I	3	Pre: PHYS 172 (min. grade C-), MA 166 (min. grade C-); ConP: MA 261, ENGR 132 (min. grade C-)			
<input type="checkbox"/>	ME 274	Basic Mechanics II	3	Pre: ME 270, ENGR 132 (C-) ConP: MA 262			
<input type="checkbox"/>	ME 323	Mechanics Of Materials	3	Pre: ME 270			
<input type="checkbox"/>	MSE 230	Structure and Properties of Materials	3	Pre: CHM 115 (min. grade C-), MA 165 (min grade C-)			

Mechanical Engineering Seminars (1 credit hour)

	<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/>	ME 290	Global Engineering Professional Seminar	1	Pre: COM 114, ENGL 106			

Name:	
UID:	
Date:	

Systems, Measurements and Control (10 credit hours)

<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/> EE 201	Linear Circuit Analysis I	3	Pre: ENGR 131, MA 166 (min grade C-), PHYS 172 (min. grade C-) ConP: MA 261			
<input type="checkbox"/> EE 207 (L)	Electronic Measurement Techniques Lab	1	ConP: EE 201			
<input type="checkbox"/> ME 365 (L)	Systems And Measurements	3	Pre: EE 201, ME 274, MA 262, EE 207			
<input type="checkbox"/> ME 375	System Modeling And Analysis	3	Pre: ME 365, MA 303			

(ME) Mechanical Sciences Credits Planned: _____

(ME) Seminars Credits Planned: _____

(ME) Systems, Measurements and Control Planned: _____

Subtotal Credits Planned: _____

(ME) Mech. Sciences Credits Completed _____

(ME) Seminars Credits Completed: _____

(ME) Systems, Measurements and Control Completed: _____

Subtotal Credits Completed: _____

(ME) Mech. Sciences Cr. Remaining: _____

(ME) Seminars Credits Remaining: _____

(ME) Systems, Measurements and Control Remaining: _____

Subtotal Credits Completed: _____

Thermal / Fluid Sciences (11 credit hours)

<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/> ME 200	Thermodynamics I	3	Pre: CHM 115 (min. grade C-), ConP: MA 261 , ENGR 132 (min. grade C-)			
<input type="checkbox"/> ME 309 (L)	Fluid Mechanics	4	Pre: ME 263, ME 274, MA 262			
<input type="checkbox"/> ME 315 (L)	Heat And Mass Transfer	4	Pre: ME 309, ME 365, MA 303			

Name:	
UID:	
Date:	

Design Courses (10 credit hours)

<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/> ME 263 (L)	Introduction To Mechanical Engineering Design, Innovation And Entrepreneurship	3	Pre: ME 200, ME 270, COM 114, ENGL 106 , ENGR 132 ConP: MA 262, ME 290, CGT 163			
<input type="checkbox"/> ME 352 (L)	Machine Design I	4	Pre: ME 263, ME 274 and ME 323			
<input type="checkbox"/> ME 463 (L)	Engineering Design	3	Pre: ME 315, ME 352, ME 375, MSE 230			

Restricted Electives (6 credit hours)

Complete two of the following three courses. The remaining course may be taken as a professional elective or as a free elective: ME 300, ME 452, ME 475 (L)

<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/> ME 300	Thermodynamics II	3	Pre: ME 200 , ME 263			
<input type="checkbox"/> ME 452	Machine Design II	3	Pre: ME 352, MSE 230			
<input type="checkbox"/> ME 475 (L)	Automatic Control Systems	3	Pre: ME 375			

Professional Electives (12 credit hours)

Select 4 professional elective courses from the pool of Professional Electives in Mechanical Engineering:

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

Name:	
UID:	
Date:	

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

Page 1 Credits Planned : _____

Thermal / Fluid Sciences Credits Planned (min): _____

Design Courses Credits Planned (min) _____

Restricted Electives Credits Planned (min): _____

Professional Electives Planned (min): _____

Subtotal Credits Planned (min): _____

Page 1 Credits Completed : _____

Thermal / Fluid Sciences Credits Completed (min): _____

Design Courses Credits Completed (min) _____

Restricted Electives Credits Completed (min): _____

Professional Electives Planned (min): _____

Subtotal Credits Completed (min): _____

Page 1 Credits Remaining : _____

Thermal/Fluid Sci. Cr. Remaining (min): _____

Design Courses Cr. Remaining (min) _____

Restricted Elec. Cr. Remaining (min): _____

Professional Elec. Planned (min): _____

Subtotal Credits Remaining (min): _____

General Engineering Requirements (6 credit hours)

Introduction to Engineering (4 credit hours):

<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/>	ENGR 131	Transforming Ideas to Innovation I	2			
<input type="checkbox"/>	ENGR 132	Transforming Ideas to Innovation II	2	Pre: ENGR 131 (Min. Grade C-)		
OR						
<input type="checkbox"/>	ENGR 100	First-Year Engineering Lectures	1			
<input type="checkbox"/>	ENGR 126	Engineering Problem Solving and Computer Tools	3			

Name:	
UID:	
Date:	

General Engineering Requirement for Mechanical Engineering (2 credit hours):

<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/> CGT 163	Graphical Communication And Spatial Analysis	2				

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

Mathematics Requirement (19 credit hour):

<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/> MA 165	Analytic Geometry and Calculus I	4	Pre: MAT 110 or MA 158 or passing Math Placement Test			
<input type="checkbox"/> MA 166	Analytic Geometry and Calculus II	4	Pre: MA 165			
<input type="checkbox"/> MA 261	Multivariate Calculus	4	Pre: MA 166			
<input type="checkbox"/> MA 262	Linear Algebra And Differential Equations	4	Pre: MA 261			
<input type="checkbox"/> MA 303	Differential Equations and Partial Differential Equations for Engineering and the Sciences	3	Pre: MA 262 OR (MA 265 and MA 266)			

Mathematics Credits Planned: _____
 Mathematics Credits Completed: _____
 Mathematics Credits Remaining: _____

Name:	
UID:	
Date:	

Science Requirements (14-15 credit hours):

<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/> PHYS 172	Modern Mechanics	4	ConP: MA 165 (min. grade C-)			
<input type="checkbox"/> PHYS 241	Electricity And Optics	3	Pre: PHYS 172 (min. grade C-), ConP: MA 166 (min. grade C-)			
<input type="checkbox"/> CHM 115	General Chemistry I	4	ConP: MA 165			

Science Selectives (3-4 credit hours)

<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req, ConP</u>	<u>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/> CHM 112	General Chemistry	3	Pre: CHM 115			
<input type="checkbox"/> CHM 116	General Chemistry II	4	Pre: CHM 115			
<input type="checkbox"/> BIOL 126	Human Biology	3				
<input type="checkbox"/> PHYS 322	Intermediate Optics	3	Pre: PHYS 272 or PHYS 241			

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

Name:	
UID:	
Date:	

Liberal Arts Requirements (27-28 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>Other Information</u>	<u>Semester</u>	<u>Comments</u>
<input type="checkbox"/> ENGL 100	English for Academic Studies	3				
<input type="checkbox"/> ENGL 106	First-Year Composition	4	ENGL 100			
<input type="checkbox"/> COM 114	Fundamentals Of Speech Communication	3	ENGL 100			

General Education Electives (17-18 credits):

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

Liberal Arts Credits Planned: _____

Liberal Arts Credits Completed: _____

Liberal Arts Credits Remaining: _____



Name:	
UID:	
Date:	

Free Electives (3 credit hours):

<u>Course Code</u>	<u>Course Title</u>	<u>CR</u>	<u>Pre-Req. ConP</u>	<u>Other Information</u>	<u>Term</u>	<u>Comments</u>
<input type="checkbox"/>						
<input type="checkbox"/>						

* Remedial courses are courses that must be taken by student in order to build up certain academic knowledge or skills like math or English.

Minimum Total Credits Required for Degree: 132

Total Credits Planned: _____

Total Credits Completed: _____

Total Credits Remaining: _____