## University of Iowa - College of Engineering & Iowa Lakes Community College



Fall PHYS:1612 Introductory Physics II (Without Lab) 3 PHY 222 Classical Physics II ENGR:2110 Engineering Fundamentals I:Statics 2 EGT 139 Statics Engineering General Education Component #2 3 ME:2020 Sophomore Seminar: Mechanical Engineering 0 No equivalent course offered Total 17  Semester 4  ENGR:2720 Materials Science 3 No equivalent course offered ENGR:2750 Mechanics of Deformable Bodies 3 No equivalent course offered ENGR:2760 Design for Manufacturing 3 No equivalent course offered STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered			N. f 1	I T						
MATH:150   Engineering Math   - Single Variable Calculus   4   BOTH   MAT 211   Calculus     MAT 217   Calculus     MAT 218   MAT 217   Calculus     MAT 218   MAT					Lnginee					
MATH:1550   Engineering Math I - Single Variable Calculus   4   BOTH   MAT 211   Calculus II		UI Course #	University of Iowa Course Title	SH		ILCC Course #	Iowa Lakes Course Title	SH		
MATH:1550   Engineering Math I - Single Variable Calculus   4   80TH	Semester 1				1					
ENGR:1100   Engineering Problem Solving		MATH:1550	Engineering Math I – Single Variable Calculus	4	вотн		Calculus I	5		
CHEM:1110						MAT 217	Calculus II	5		
Fall RHET:1030 Rhetoric (Writing Component 1, Writing Component 2, and a single Speech Component 1, Writing Component 2, and a single Speech Component 1, Writing Component 2, and a single Speech Component 1, Writing Component 2, and a single Speech Component 1, Writing Component 2, and a single Speech Component 1, Writing Component 2, and a single Speech Component 1, Writing Component 2, and a single Speech Component 1, Writing Component 2, and a single Speech Component 1, Writing Component 2, and a single Speech Component 1, Writing Component 2, and a single Speech Component 1, Writing Component 2, and a single Speech Component 2, and a single Speech Component 2, and a single Speech Component 3, Serial 1,		ENGR:1100	Engineering Problem Solving I	3		No equivalent co	o equivalent course offered			
RHET:1030 Rhetoric (Writing Component 1, Writing Component 2, and a single Speech Component all required)  ENGR:1000 Engr Success for First-Year Students Total  Semester 2  MATH:1500 Engineering Math II – Multivariable Calculus AMATH:2550 Engineering Math III – Multivariable Calculus AMATH:2550 Engineering Problem Solving II ENGR:1300 Engineering Problem Solving II Total  Semester 3  MATH:2550 Engineering Math III – Multivariable Calculus AMATH:2550 Engineering Math III – Multivariable Calculus AMATH:2550 Engineering Problem Solving II AMATH:2550 Engineering Math IV – Differential Equations AMATH:2550 Engineering Fundamentals I:Statics ENGR:2110 Engineering Fundamentals I:Statics Engineering Eudamentals I:Statics Engineering ENGR:2200 Sophomore Seminar: Mechanical Engineering O No equivalent course offered ENGR:2750 Materials Science ENGR:2750 Amaterials Science ENGR:2750 Materials Sci		CHEM:1110	Principles of Chemistry I & Lab	4		CHM 166	General Chemistry I	5		
RHET:1030 Rhetoric (Writing Component 1, Writing Component 2, and a single Speech Component all required) And a single Speech Component all required)  ENGR:1000 Engr Success for First-Year Students Total  1* No equivalent course offered  No equivalent course offered  MATH:1560 Engineering Math III – Multivariable Calculus ATH:2550 Engineering Math III – Matrix Algebra ENGR:1300 Engineering Problem Solving II  ENGR:1300 Engineering Problem Solving II  General Education Component #1  Total  ATH:2560 Engineering Math IV – Differential Equations Fall ENGR:110 Engineering Math IV – Differential Equations ATH:2560 Engineering Math IV – Differential Equations ATH:2560 Engineering Fundamentals is Statics General Education Component #2  ATH:2560 Engineering Fundamentals is Statics Total  ENGR:2100 Engineering Fundamentals is Statics Total  ENGR:2200 Sophomore Seminar: Mechanical Engineering ATH:2560 ENGR:2750 Mechanics of Deformable Bodies  No equivalent course offered  ENGR:2750 Mechanics of Deformable Bodies  No equivalent course offered  ENGR:2750 Mechanics of Deformable Bodies  ANO equivalent course offered  No equivalent course offered  No equivalent course offered	Fall	RHET:1030		4		ENG 105	Composition I	3		
and a single Speech Component all required)  ENGR:1000 Engr Success for First-Year Students Total  Semester 2  Spring  MATH:1560 Engineering Math II – Multivariable Calculus  ATH:2550 Engineering Math III – Multivariable Calculus  ENGR:1300 Engineering Math III – Multivariable Calculus  ENGR:1300 Engineering Problem Solving II  ENGR:1310 Engineering Problem Solving II  Total  Semester 3  Semester 3  Fall  Fall  ENGR:2120 Engineering Math III – Multivariable Calculus  ATH:2550 Engineering Problem Solving II  ATH:2550 Engineering Problem Solving II  BENGR:1300 Engineering Problem Solving II  ATH:2550 Engineering Problem Solving II  BENGR:1300 Engineering Math IV – Differential Equations  ATH:2550 Engineering Fundamentals I:Statics  ENGR:2110 Engineering Fundamentals I:Statics  ENGR:2110 Engineering Fundamentals I:Statics  ATH:2020 Sophomore Seminar: Mechanical Engineering  General Education Component #2  ATH:2550 Materials Science  ENGR:2750 Materials Science  ENGR:2750 Mechanics of Deformable Bodies  A No equivalent course offered  No equivalent course offered  STAT:2020 Probability and Stat for Engineering & Phys Sci  A No equivalent course offered  No equivalent course offered					CHOOSE 1	ENG 106	Composition II	3		
ENGR:1000   Engr Success for First-Year Students   1*   No equivalent course offered						SPC 112	Public Speaking (Speech Component)	3		
Total   16						SPC 101	Fund. Of Oral Communication	3		
Semester 2  RATH:1560 Engineering Math II – Multivariable Calculus 4 Mat 218** Calculus III  MATH:2550 Engineering Math III – Matrix Algebra 2 No equivalent course offered  CIS 171 Java  CHOOSE 1 CIS 161 C++  PHYS:1611 Introductory Physics I with Lab 4 PHY 212 Classical Physics I  General Education Component #1 3 Total 16  Semester 3  MATH:2560 Engineering Math IV – Differential Equations 3 MAT 227 Differential Equations with Laplace Transforms PHYS:1612 Introductory Physics II (Without Lab) 3 PHY 222 Classical Physics II  ENGR:2110 Engineering Fundamentals I:Statics 2 EGT 139 Statics Engineering Engineering General Education Component #2 3 ME:2020 Sophomore Seminar: Mechanical Engineering 0 No equivalent course offered  Total 17  Semester 4  ENGR:2750 Materials Science 3 No equivalent course offered  ENGR:2750 Mechanics of Deformable Bodies 3 No equivalent course offered  ENGR:2760 Design for Manufacturing 3 No equivalent course offered  STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered		ENGR:1000	Engr Success for First-Year Students	1*		No equivalent course offered				
MATH:1560 Engineering Math II – Multivariable Calculus 4 Mat 218** Calculus III  MATH:2550 Engineering Math III – Matrix Algebra 2 No equivalent course offered  ENGR:1300 Engineering Problem Solving II 3 CHOOSE 1 CIS 171 Java  CIS 162 C++  CIS 161 C++  PHYS:1611 Introductory Physics I with Lab 4 PHY 212 Classical Physics I  General Education Component #1 3 Total 16  Semester 8  MATH:2560 Engineering Math IV – Differential Equations 3 MAT 227 Differential Equations with Laplace Transforms PHYS:1612 Introductory Physics II (Without Lab) 3 PHY 222 Classical Physics II  ENGR:2110 Engineering Fundamentals I:Statics 2 EGT 139 Statics Engineering General Education Component #2 3 ME:2020 Sophomore Seminar: Mechanical Engineering 0 No equivalent course offered  Semester 4  ENGR:2720 Materials Science 3 No equivalent course offered STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered  TOTAL STATE OF THE MATH: A place Transforms 1 No equivalent course offered STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered			Total	16						
Spring HNGR:1300 Engineering Math III – Matrix Algebra 2 No equivalent course offered  ENGR:1300 Engineering Problem Solving II  ENGR:1300 Engineering Problem Solving II  ENGR:1310 Introductory Physics I with Lab  General Education Component #1  Total  Semester 8  MATH:2560 Engineering Math IV – Differential Equations  Fall ENGR:2110 Engineering Math IV – Differential Equations  General Education Component #2  AE:2020 Sophomore Seminar: Mechanical Engineering  Total  Semester 4  ENGR:2720 Materials Science  ENGR:2750 Mechanics of Deformable Bodies  OR  ENGR:2760 Design for Manufacturing  STAT:2020 Probability and Stat for Engineering & Phys Sci  3 No equivalent course offered	Semester 2	2								
Spring ENGR:1300 Engineering Problem Solving II 3 CHOOSE 1 CIS 171 Java  ENGR:1300 Engineering Problem Solving II 3 CHOOSE 1 CIS 162 C++  PHYS:1611 Introductory Physics I with Lab 4 PHY 212 Classical Physics I  General Education Component #1 3 Introductory Physics I Without Introductory Physics I Introductory Physics II Introductory Physics II Introductory Physics II (Without Lab) Introductory Physics II (Without Lab) Introductory Physics II (Without Lab) Introductory Physics II Introductory Introductory Physics II Introductory		MATH:1560	Engineering Math II – Multivariable Calculus	4		Mat 218**	Calculus III	3		
ENGR:1300 Engineering Problem Solving II 3 CHOOSE 1 CIS 162 C++  PHYS:1611 Introductory Physics I with Lab 4 PHY 212 Classical Physics I General Education Component #1 3 Total 16  Semester 3  MATH:2560 Engineering Math IV – Differential Equations 3 MAT 227 Differential Equations with Laplace Transforms PHYS:1612 Introductory Physics II (Without Lab) 3 PHY 222 Classical Physics II ENGR:2110 Engineering Fundamentals I:Statics 2 EGT 139 Statics Engineering ENGR:2110 Engineering Fundamentals I:Statics 2 EGT 139 Statics Engineering Method Component #2 3 ME:2020 Sophomore Seminar: Mechanical Engineering 0 No equivalent course offered Total 17  Semester 4  ENGR:2720 Materials Science 3 No equivalent course offered No equivalent course off		MATH:2550	Engineering Math III – Matrix Algebra	2		No equivalent course offered				
Spring    CIS 161   C++     PHYS:1611   Introductory Physics I with Lab   4   PHY 212   Classical Physics I     General Education Component #1   3     Total   16     Semester 3		ENGR:1300	Engineering Problem Solving II			CIS 171	Java	3		
CIS 161 C++ PHYS:1611 Introductory Physics I with Lab	Spring			3	CHOOSE 1	CIS 162	C++	4		
General Education Component #1 3 16 Semester 3  MATH:2560 Engineering Math IV – Differential Equations 3 MAT 227 Differential Equations with Laplace Transforms PHYS:1612 Introductory Physics II (Without Lab) 3 PHY 222 Classical Physics II ENGR:2110 Engineering Fundamentals I:Statics 2 EGT 139 Statics Engineering General Education Component #2 3 ME:2020 Sophomore Seminar: Mechanical Engineering 0 No equivalent course offered Total 17 Semester 4  ENGR:2720 Materials Science 3 No equivalent course offered	Spring					CIS 161	C++	3		
Total  Total  Total  Semester 3  MATH:2560 Engineering Math IV – Differential Equations  PHYS:1612 Introductory Physics II (Without Lab)  ENGR:2110 Engineering Fundamentals I:Statics  General Education Component #2  ME:2020 Sophomore Seminar: Mechanical Engineering  Total  Total  Semester 4  ENGR:2720 Materials Science  ENGR:2750 Mechanics of Deformable Bodies  OR  ENGR:2760 Design for Manufacturing  STAT:2020 Probability and Stat for Engineering & Phys Sci  Total  16  MAT 227 Differential Equations with Laplace Transforms  MAT 227 Differential Equations with Laplace Transforms  PHY 222 Classical Physics II  EGT 139 Statics Engineering  No equivalent course offered		PHYS:1611	Introductory Physics I with Lab	4		PHY 212	Classical Physics I	5		
Semester 3  MATH:2560 Engineering Math IV – Differential Equations 3 MAT 227 Differential Equations with Laplace Transforms PHYS:1612 Introductory Physics II (Without Lab) 3 PHY 222 Classical Physics II ENGR:2110 Engineering Fundamentals I:Statics 2 EGT 139 Statics Engineering General Education Component #2 3 ME:2020 Sophomore Seminar: Mechanical Engineering 0 No equivalent course offered Total 17  Semester 4  ENGR:2720 Materials Science 3 No equivalent course offered ENGR:2750 Mechanics of Deformable Bodies 3 No equivalent course offered ENGR:2760 Design for Manufacturing 3 No equivalent course offered STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered			General Education Component #1	3						
MATH:2560 Engineering Math IV – Differential Equations 3 MAT 227 Differential Equations with Laplace Transforms  PHYS:1612 Introductory Physics II (Without Lab) 3 PHY 222 Classical Physics II  ENGR:2110 Engineering Fundamentals I:Statics 2 EGT 139 Statics Engineering  General Education Component #2 3 ME:2020 Sophomore Seminar: Mechanical Engineering 0 No equivalent course offered  Total 17  Semester 4  ENGR:2720 Materials Science 3 No equivalent course offered  ENGR:2750 Mechanics of Deformable Bodies 3 No equivalent course offered  ENGR:2760 Design for Manufacturing 3 No equivalent course offered  STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered			Total	16						
Fall PHYS:1612 Introductory Physics II (Without Lab) 3 PHY 222 Classical Physics II ENGR:2110 Engineering Fundamentals I:Statics 2 EGT 139 Statics Engineering General Education Component #2 3 ME:2020 Sophomore Seminar: Mechanical Engineering 0 No equivalent course offered Total 17  Semester 4  ENGR:2720 Materials Science 3 No equivalent course offered ENGR:2750 Mechanics of Deformable Bodies 3 No equivalent course offered No equivalent course offered STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered	Semester 3	3								
Fall ENGR:2110 Engineering Fundamentals I:Statics 2 EGT 139 Statics Engineering General Education Component #2 3 No equivalent course offered Total 17  Semester 4  ENGR:2720 Materials Science 3 No equivalent course offered ENGR:2750 Mechanics of Deformable Bodies 3 No equivalent course offered ENGR:2760 Design for Manufacturing 3 No equivalent course offered STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered		MATH:2560	Engineering Math IV – Differential Equations	3		MAT 227	Differential Equations with Laplace Transforms	4		
General Education Component #2 3 ME:2020 Sophomore Seminar: Mechanical Engineering 0 No equivalent course offered Total 17  Semester 4  ENGR:2720 Materials Science 3 No equivalent course offered ENGR:2750 Mechanics of Deformable Bodies 3 No equivalent course offered ENGR:2760 Design for Manufacturing 3 No equivalent course offered STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered		PHYS:1612	Introductory Physics II (Without Lab)	3		PHY 222	Classical Physics II	5		
ME:2020 Sophomore Seminar: Mechanical Engineering 0 No equivalent course offered  Total 17  Semester 4  ENGR:2720 Materials Science 3 No equivalent course offered  ENGR:2750 Mechanics of Deformable Bodies 3 No equivalent course offered  ENGR:2760 Design for Manufacturing 3 No equivalent course offered  STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered	Fall	ENGR:2110	Engineering Fundamentals I:Statics	2		EGT 139	Statics Engineering	3		
Total 17  Semester 4  ENGR:2720 Materials Science 3 No equivalent course offered ENGR:2750 Mechanics of Deformable Bodies 3 No equivalent course offered No equivalent course offered STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered No equivalent course offered			General Education Component #2	3			•			
Semester 4  ENGR:2720 Materials Science 3 No equivalent course offered ENGR:2750 Mechanics of Deformable Bodies 3 No equivalent course offered  ENGR:2760 Design for Manufacturing 3 No equivalent course offered  STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered		ME:2020	Sophomore Seminar: Mechanical Engineering	0		No equivalent co	No equivalent course offered			
ENGR:2720 Materials Science 3 No equivalent course offered ENGR:2750 Mechanics of Deformable Bodies 3 No equivalent course offered  ENGR:2760 Design for Manufacturing 3 No equivalent course offered  STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered			Total	17						
ENGR:2750 Mechanics of Deformable Bodies 3 No equivalent course offered  ENGR:2760 Design for Manufacturing 3 No equivalent course offered  STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered	Semester 4	1								
OR ENGR:2760 Design for Manufacturing 3 No equivalent course offered STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered		ENGR:2720	Materials Science	3		No equivalent course offered				
OR STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered		ENGR:2750	Mechanics of Deformable Bodies	3		No equivalent course offered				
STAT:2020 Probability and Stat for Engineering & Phys Sci 3 No equivalent course offered	OR	ENGR:2760	Design for Manufacturing	3		No equivalent course offered				
		STAT:2020	Probability and Stat for Engineering & Phys Sci	3		No equivalent course offered				
Spring   ENGR:2710   Dynamics   3   No equivalent course offered	Spring	ENGR:2710	Dynamics	3		No equivalent co	urse offered			
Elective Focus Area #1 3			Elective Focus Area #1	3						
Total 15			Total	15						

Mechanical Engineering											
	UI Course #	University of Iowa Course Title	SH	ILCC Course #	Iowa Lakes Course Title	SH					
Semester!	5										
	MATH:3550	Engineering Math V: Vector Calculus	3 No equivalent		course offered						
	ENGR:2510	Fluid Mechanics	4	No equivalent co	ourse offered						
O.D.	STAT:2020	Probability and Stat for Engineering & Phys Sci	3	No equivalent co	No equivalent course offered						
OR	ENGR:2760	Design for Manufacturing	3	No equivalent co	No equivalent course offered						
Fall	ENGR:2730	Computers in Engineering (Section 002)	2	No equivalent co	No equivalent course offered						
	ME:3351	Engineering Instrumentation	2	No equivalent co	No equivalent course offered						
		Elective Focus Area #2	3								
	ME:3091	Professional Seminar: Mechanical Engineering	0	No equivalent co	No equivalent course offered						
		Total	17								
Semester	6										
	ME:3040	Thermodynamics II	3	No equivalent co	ourse offered						
	ME:3045	Heat Transfer	3	No equivalent co	ourse offered						
Spring	ME:3052	Mechanical Systems	4	No equivalent co	ourse offered						
Shiild		Elective Focus Area #3	3								
		General Education Component #3	3								
		Total	16								
Semester	7										
	ME:4048	Energy Systems Design	4	No equivalent co	ourse offered						
	ME:4055	Mechanical Systems Design	3	No equivalent co	ourse offered						
OR		Elective Focus Area #4	3	No equivalent co	ourse offered						
OK	ME:4086	Mechanical Engineering Design Project	3	No equivalent co	ourse offered						
OR		Elective Focus Area #5	3	No equivalent co	ourse offered						
	ME:4080	Experimental Engineering	4	No equivalent co	ourse offered						
Fall		General Education Component #4	3								
	ME:3091	Professional Seminar: Mechanical Engineering	0	No equivalent co	ourse offered						
		Total	16								
Semester	8										
OR	ME:4086	Mechanical Engineering Design Project	3	No equivalent co	ourse offered						
OIL		Elective Focus Area #4	3								
OR	ME:4080	Experimental Engineering	4	No equivalent co	ourse offered						
		Elective Focus Area #5	3								
Spring		Elective Focus Area #6	3								
		Elective Focus Area #7	3								
		General Education Component	3								
		Total	16								

2017-18 Curriculum updated June 2018

 $<sup>\</sup>ensuremath{^{*}}$  1sh; does not count toward 128 sh total required for graduation

<sup>\*\*</sup>Students must have completed Calculus I, II, and III to receive credit for Engineering Math II