## University of Iowa - College of Engineering & Indian Hills Community College



Materials			Piomodica	l E	'nginoo	ring				
MATH 1500   Engineering Math i = Single Variable Calculus   4   80TH		III Common #		_	ingmee	<u> </u>	Ladra William Communication	Lou		
MATE   1550   Engineering Math   - Single Variable Calculus   4   MAT   210   Calculus   1   4   MAT   220   Calculus   1   MAT   220   Calculus   2   MAT	Samastar 1		University of Iowa Course Title	SH		IHCC Course #	Indian Hills Course Title	SH		
FINISH   F	Jemester 1		Engineering Math I – Single Variable Calculus	4		MAT 210	Calculus I	4		
Fall   CHEM:1110   Principles of Chemistry I & Lab   A   BOTH   CHEM:158   Principles of Chemistry I   3   3   CHEM:158   Principles of Chemistry I   5   5   CHEM:159   Principles of Chemistry I   5   CHEM:159   Principles of Chemistry I   5   CHEM:159   Principles of Chemistry I   5   CHEM:159					вотн	MAT 216		4		
CHEM:1110		ENGR:1100	Engineering Problem Solving I	3		EGR 160	Engineeirng I	_		
CHEM.1110		CHEM:1110	Principles of Chemistry I & Lab	4	POTU	CHM 157	Principles of Chemistry	3		
Fail   RHET-1030   Rhetoric (Writing Component 1, Writing Component 2, and a single Speech Component 3, Writing Component 2, and a single Speech Component all required)   4					вотн	CHM 158	Principles of Chemistry II	3		
RHET:1030					OR	CHM 166	General Chemistry I	5		
RHET:1030	Fall	RHET:1030		4		ENG 105	Composition I (Writing Component I)	3		
Reference   Secretary   Secr						ENG 106	Composition II (Writing Component II)	3		
ENGR:1000   Engr Success for First-Year Students   1*   No equivalent course offered					CHOOSE 1	SPC 101		3		
Total   16						SPC 112	SPC 112: Public Speaking (Speech Component)	3		
MATH::550   Engineering Math III - Multivariable Calculus   4   MAT :219**   Calculus III   4   4   MATH::550   Engineering Math III - Multivariable Calculus   4   EGR 162   Engineering Math - Matrix Algebra   2   2   EGR 165   Engineering Math - Matrix Algebra   2   2   EGR 165   Engineering III   3   3   3   3   2   2   2   2   2   2		ENGR:1000	Engr Success for First-Year Students	-		No equivalent course offered				
MATH:1560   Engineering Math II - Multivariable Calculus			Total	16						
MATH:2550   Engineering Math III — Matrix Algebra   2   EGR 162   Engineering Math — Matrix Algebra   2   EGR 162   Engineering Math — Matrix Algebra   3   3   CHOOSE 1   CIS 171   Java   3   CHOOSE 1   CHOOSE 1   CHOOSE 1   CIS 171   Java   3   CHOOSE 1   CHOOSE 1   CIS 171   Java   3   CHOOSE 1   CHOOSE 1   CHOOSE 1   CIS 171   Java   3   CHOOSE 1   CIS 171   Java   3   CHOOSE 1   CHOOSE 1   CHOOSE 1   CHOOSE 1   CIS 171   C	Semester 2									
ENGR:1300   Engineering Problem Solving II   3   CHOOSE 1   CIS 171   Java   3   CHOOSE 1   CIS 169   CI   Java   CIS 169   CIS 1				1				+		
Family   F		MATH:2550	Engineering Math III – Matrix Algebra	2				+		
Spring   PHYS:1611   Introductory Physics I with Lab   4   BOTH   PHY 200   Classical Physics I   3   3   3   2   3   3   2   3   3   3		ENGR:1300	Engineering Problem Solving II	3	CUOOSE 1			+		
Spring Final Registration of Spring Registra					CHOOSE 1			+		
PHYS:1611		PHYS:1611	Introductory Physics I with Lab	4				+		
CHEM:1120 Principles of Chemistry II & Lab  4 POR CHM 158 Principles of Chemistry II & 4  OR CHM 159 Principles of Chemistry II & 5  BME:1010 BME Forum 1* No equivalent course offered  Total 18  Semester 3  Fall ENGR:2110 Engineering Math IV – Differential Equations 3 MAT 226 Differential Equations with Laplace 3 BIOL:1411 Foundations of Biology 4 BOTH BIO 121 General Biology ID 4 BIO 121 General Biology ID 3 BIO 121 General Biology ID 3 ENGR:2120 Engineering Fundamentals I – Statics 2 EGR 180 Statics 3 EGR 284 Intro to Electrical Circuits 3 EGR 290 Thermodynamics 3 BEGR 290 Thermodynamics 4 No equivalent course offered  Semester 4  Semester 4  BIO:210 Bio-Materials & Mechanics / Lab Acquistion/Lab A No equivalent course offered  BIO:2110 Bioimaging & Bioinformatics/Lab A No equivalent course offered  BIO:2120 Bioimaging & Bioinformatics/Lab A No equivalent course offered  BIO:2120 Bioimaging & Bioinformatics/Lab A No equivalent course offered  BIO:2120 BIO:	Spring				вотн			-		
CHEM:1120 Principles of Chemistry II & Lab  A BOTH CHM 159 Principles of Chemistry III 4  OR CHM 176 General Chemistry III 5  BME:1010 BME Forum 1* No equivalent course offered  Total 18  Semester 3  Fall ENGR:2110 Engineering Math IV – Differential Equations 3 MAT 226 Differential Equations with Laplace 3 BIOL:1411 Foundations of Biology 4 BOTH BIO 121 General Biology ID 3 GENGR:2120 Engineering Fundamentals II – Electrical Circuits 3 EGR 284 Intro to Electrical Circuits 3 EGR 284 Intro to Electrical Circuits 3 EGR 290 Thermodynamics 3 EGR 290 Thermodynamics 3 BME:2010 BME Professional Seminar 1* No equivalent course offered  Semester 4  HHP:3500 Human Physiology 3 BIO 178 Human Physiology 3 BME:2500 Bio- Materials & Mechanics / Lab No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 BME:2210 BME:2310 Biostatistics (STAT:3510 Biostatistics) 3 No equivalent course offered  BME:2210 BME:2210 BME:2310 BME:2350 BME:235		CHEM:1120	Principles of Chemistry II & Lab	4				+		
No equivalent course offered   Semester					вотн	-		+ -		
BME:1010   BME Forum   1*					OR		, · · · · · · · · · · · · · · · · · · ·	_		
MATH:2560   Engineering Math IV - Differential Equations   3   MAT 226   Differential Equations with Laplace   3		BME:1010	BME Forum	1*		No equivalent co	·			
HAT 2560 Engineering Math IV – Differential Equations 3 MAT 226 Differential Equations with Laplace 3  BIOL:1411 Foundations of Biology 4 BOTH BIO 121 General Biology ID 4  ENGR:2110 Engineering Fundamentals I – Statics 2 EGR 180 Statics 3  ENGR:2120 Engineering Fundamentals III – Electrical Circuits 3 EGR 284 Intro to Electrical Circuits 3  ENGR:2130 Engineering Fundamentals III – Thermodynamics 3 EGR 284 Intro to Electrical Circuits 3  BME:2010 BME Professional Seminar 1* No equivalent course offered  Semester 4  Spring BME:2500 Bio- Materials & Mechanics / Lab 4 No equivalent course offered  BME:2200 Systems, Instrumentation, & Data Acquistion/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 BME Professional Seminar 1* No equivalent course offered  BME:2210 BME Professional Seminar 1* No equivalent course offered  BME:2210 BME Professional Seminar 1* No equivalent course offered			Total	18		<u> </u>				
Fall BIOL:1411 Foundations of Biology 4 BOTH BIO 120 General Biology ID 4 BIO 121 General Biology IID 3  ENGR:2110 Engineering Fundamentals I – Statics 2 EGR 180 Statics 3  ENGR:2120 Engineering Fundamentals III – Electrical Circuits 3 EGR 284 Intro to Electrical Circuits 3  ENGR:2130 Engineering Fundamentals III – Thermodynamics 3 EGR 290 Thermodynamics 3  BME:2010 BME Professional Seminar 1* No equivalent course offered  Semester 4  HHP:3500 Human Physiology 3 BIO 178 Human Physiology 3  BME:2500 Bio- Materials & Mechanics / Lab 4 No equivalent course offered  BME:2200 Systems, Instrumentation, & Data Acquistion/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 7 No equivalent course offered  BME:2010 BME Professional Seminar 1* No equivalent course offered	Semester 3	3								
Fall Foundations of Biology  BIO 121 General Biology IID 3  ENGR:2110 Engineering Fundamentals I – Statics 2 EGR 180 Statics 3  ENGR:2120 Engineering Fundamentals III – Electrical Circuits 3 EGR 284 Intro to Electrical Circuits 3  ENGR:2130 Engineering Fundamentals III – Thermodynamics 3 EGR 290 Thermodynamics 3  BME:2010 BME Professional Seminar 1* No equivalent course offered  Semester 4  HHP:3500 Human Physiology 3 BIO 178 Human Physiology 3  BME:2500 Bio- Materials & Mechanics / Lab 4 No equivalent course offered  BME:2200 Systems, Instrumentation, & Data Acquistion/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BIOS:4120 Intro to Biostatistics (STAT:3510 Biostatistics) 3 No equivalent course offered  BME:2010 BME Professional Seminar 1* No equivalent course offered		MATH:2560	Engineering Math IV – Differential Equations	3		MAT 226	Differential Equations with Laplace	3		
Fall ENGR:2110 Engineering Fundamentals I – Statics 2 EGR 180 Statics 3 ENGR:2120 Engineering Fundamentals II – Electrical Circuits 3 EGR 284 Intro to Electrical Circuits 3 ENGR:2130 Engineering Fundamentals III – Thermodynamics 3 EGR 290 Thermodynamics 3 BME:2010 BME Professional Seminar 1* No equivalent course offered  Total 16  Semester 4  HHP:3500 Human Physiology 3 BIO 178 Human Physiology 3 BME:2500 Bio- Materials & Mechanics / Lab 4 No equivalent course offered  BME:2210 Systems, Instrumentation, & Data Acquistion/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BIO 121 General Biology IID 3  EGR 284 Intro to Electrical Circuits 3  EGR 290 Thermodynamics 3  BIO 178 Human Physiology 3  No equivalent course offered  No equivalent course offered  No equivalent course offered  No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 BIOS:4120 Intro to Biostatistics (STAT:3510 Biostatistics) 3 No equivalent course offered  BME:2010 BME Professional Seminar 1* No equivalent course offered		BIOL:1411	Foundations of Biology	4	вотн	BIO 120	General Biology ID	4		
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ENGR:2130 Engineering Fundamentals III – Thermodynamics 3 EGR 290 Thermodynamics 3  BME:2010 BME Professional Seminar 1* No equivalent course offered  Total 16  Semester 4  HHP:3500 Human Physiology 3 BIO 178 Human Physiology 3  BME:2500 Bio- Materials & Mechanics / Lab 4 No equivalent course offered  BME:2200 Systems, Instrumentation, & Data Acquistion/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BIOS:4120 Intro to Biostatistics (STAT:3510 Biostatistics) 3 No equivalent course offered  BME:2010 BME Professional Seminar 1* No equivalent course offered	Fall	ENGR:2110	Engineering Fundamentals I – Statics	2		EGR 180	Statics	3		
BME:2010 BME Professional Seminar 1* No equivalent course offered  Total 16  Semester 4  HHP:3500 Human Physiology 3 BIO 178 Human Physiology 3  BME:2500 Bio- Materials & Mechanics / Lab 4 No equivalent course offered  BME:2200 Systems, Instrumentation, & Data Acquistion/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BIOS:4120 Intro to Biostatistics (STAT:3510 Biostatistics) 3 No equivalent course offered  BME:2010 BME Professional Seminar 1* No equivalent course offered		ENGR:2120		-						
Total 16   Semester 4  HHP:3500 Human Physiology 3 BIO 178 Human Physiology 3 BME:2500 Bio- Materials & Mechanics / Lab 4 No equivalent course offered  Spring BME:2200 Systems, Instrumentation, & Data Acquistion/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BIOS:4120 Intro to Biostatistics (STAT:3510 Biostatistics) 3 No equivalent course offered  BME:2010 BME Professional Seminar 1* No equivalent course offered				_			·	3		
Spring HHP:3500 Human Physiology 3 BIO 178 Human Physiology 3 BME:2500 Bio- Materials & Mechanics / Lab 4 No equivalent course offered  Spring BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BIOS:4120 Intro to Biostatistics (STAT:3510 Biostatistics) 3 No equivalent course offered  BME:2010 BME Professional Seminar 1* No equivalent course offered		BME:2010		_		No equivalent co	urse offered			
HHP:3500 Human Physiology 3 BIO 178 Human Physiology 3  BME:2500 Bio- Materials & Mechanics / Lab 4 No equivalent course offered  Spring BME:2200 Systems, Instrumentation, & Data Acquistion/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BIOS:4120 Intro to Biostatistics (STAT:3510 Biostatistics) 3 No equivalent course offered  BME:2010 BME Professional Seminar 1* No equivalent course offered	Composton (		Total	16						
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Spring  BME:2200 Systems, Instrumentation, & Data Acquistion/Lab 4 No equivalent course offered  BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BIOS:4120 Intro to Biostatistics (STAT:3510 Biostatistics) 3 No equivalent course offered  BME:2010 BME Professional Seminar 1* No equivalent course offered		-		1				13		
BME:2210 Bioimaging & Bioinformatics/Lab 4 No equivalent course offered  BIOS:4120 Intro to Biostatistics (STAT:3510 Biostatistics) 3 No equivalent course offered  BME:2010 BME Professional Seminar 1* No equivalent course offered	Spring		·			·				
BIOS:4120 Intro to Biostatistics (STAT:3510 Biostatistics) 3 No equivalent course offered BME:2010 BME Professional Seminar 1* No equivalent course offered		BME:2210	Bioimaging & Bioinformatics/Lab	4		No equivalent course offered				
				3						
Total 18		BME:2010	BME Professional Seminar	1*		No equivalent course offered				
			Total	18						

Biomedical Engineering											
	UI Course #	University of Iowa Course Title	SH		IHCC Course #	Indian Hills Course Title	SH				
Semester	5										
	BME:2110	Cell Biology for Engineers / Lab	3		No equivalent co	urse offered					
		Track Requisite #1	3								
	PHYS:1612	Introductory Physics II w/lab		вотн	PHY 201	Classical Physics II	3				
Fall			4		PHY 202	Classical Physics III	3				
Fall		GEC Elective #1	3								
		GEC Elective #2	3								
	BME:3010	Leadership and Resourcefulness	1*		No equivalent co	urse offered					
		Total	17								
Semester	6										
		Track Requisite #2	3								
		Track Elective #1	3								
		Track Elective #2	3								
Spring		GEC Elective #3	3								
		GEC Elective #4	3								
	BME:4010	BME Design Seminar	1*		No equivalent co	urse offered					
		Total	16								
Semester	7										
	BME:4910	BME Design I	4		No equivalent co	urse offered					
		Track Elective #3	3								
Fall		Track Elective #4	3								
		Track Requisite #3	3								
		Track Requisite #4	3								
		Total	16								
Semester											
	BME:4920	BME Design II	4		No equivalent co	urse offered					
		Track Elective #5	3								
Spring		Track Elective #6	3								
. 0		Track Elective #7	3								
		GEC Elective #5	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

<sup>\*\*\*</sup>Students must complete BIO 120, BIO 121, & BIO 122 in order to receive credit for BIOL:1411 & BIOL 1412 (BIOL:1412 is an approved Track Elective)