Biomedical Engineering Curriculum Degree Audit

Full Name					
Student ID					
Email					
Classification	rst Year	□ Sophomo	re 🗆 Junior	☐ Senior	
xpected Graduation Year		and S	semester \square Sprir	ng 🗆 Fall 🗆 Su	mmer
^{2nd} major?			Minor(s)?		
r e-Health? 🗌 Yes 🗌 N		oad or Co-Ops e provide dates			
schedule Plan for:	Fall	Spring	Schedule Plan f	or Summer I	
Courses		Units		Courses	Units
Example: BME 201		3			
			Schedule Plan f	or Summer II	
				Courses	Units
st any classes you plan to t	ake at UNC ir	the upcoming	g semester.		
INC PID:					
Class	Section	Approved a	s a Substitute for	Fall/Spring/Summe	er
ave discussed my schedulo xt semester. I have also di ust take to complete the ro	scussed my d	egree audit ar			
tudent's Signature		Date	Advisor's Sigr	natura	Date

First Year

			Completed? ✓	Or which semester/year you plan to take:
		Examples:	√	Spring 2021
E	101	Introduction to Engr & Prob Solv ^{1,2}		
Е	102	Engineering in the 21st Century (GEP IP) 1		
E	115	Introduction to Computing Environ ^{1,2}		
СН	101/102	Chemistry, A Molecular Science ¹ / General Chemistry Lab ¹		
MA	141	Calculus I ¹		
MA	241	Calculus II ¹		
PY	205/206	Physics for Engr & Sc I ¹ / Physics for Engr & Sc I Lab ¹		
ENG	101	Academic Writing and Research ^{1, 2}		
СН	201/202	Chemistry: A Quantitative Science / Quantitative Chemistry Lab		
EC	□ EC 201 or □ EC 205 or □ ARE 201	Economics (GEP Soc Sci Req*) ³		

- 1. Course required for CODA. CH 101,102: MA 141,241; PY 205, 206 must be completed with a C or higher.
- 2. Grade of C- or better required. E 115 requires a satisfactory completion (S).
- 3. Choose from EC 201 or 205, or ARE 201.

Sophomore Year

			Completed? ✓	Or which semester/year you plan to take:
		Examples:	✓	Spring 2021
BME	201	Computer Methods in BME		Fall
BME	205	Intro to Biomedical Mechanics		
BME	207	Biomedical Electronics		
BME	209	Intro to Mat Sci of Biomaterials		
BME	298	BME Design and Manufacturing I		
MA	242	Calculus III		
PY	208/209	Physics for Engr & Sc II and Lab		
BIO	183	Intro Biology: Cellular & Molecular		
СН	221/222	Organic Chemistry I and Lab		

Junior Year

			Completed? ✓	Or which semester/year you plan to take:
		Examples:	✓	Spring 2021
BME	301	Human Physiology: Electrical Analysis		Fall
BME	302	Human Physiology: Mechanical Analysis		
BME	398	BME Design and Manufacturing II		
BME	35	Gateway Elective 1:		
ВМЕ	35	Gateway Elective 2:		
ВМЕ	35	Gateway Elective 3:		
MA	☐ 341 or ☐ 331	Applied Diff Equations or Diff Equations for the Life Sciences STEM Elective:		

*STEM Elective

Visit https://docs.google.com/spreadsheets/d/1cm9VQQeoFE7yuMmbzJl1NICmR-P3J_iQ-zkjrl6XETQ/edit?usp=sharing for a list of suggested STEM elective courses.

BME Gateway electives offered in the Fall:

BME 315: Biotransport

BME 325: Biochemistry for Biomedical Engineers BME 365: Linear Systems in Biomedical Engineering

BME 385: Bioinstrumentation

BME Gateway electives offered in the Spring:

BME 335: Biomaterials

BME 345: Biomedical Solid Mechanics

BME 355: Biocontrols

BME 375: Microprocessors

Senior Year

			Completed? ✓	Or which semester/year you plan to take:
		Examples:	✓	Spring 2021
BME	451	BME Senior Design I		Fall
BME	452	BME Senior Design II		Spring
		Specialty Elective 1:		
		Specialty Elective 2:		
		Specialty Elective 3:		
		Specialty Elective 4:		

BME Areas for Specialty Electives:

Visit https://bme.unc.edu/wp-content/uploads/sites/917/2023/09/Joint-BME-Specialty-Electives.pdf for a specific list of Specialty Electives. Students will take four specialty electives from no more than two specialization areas.

- Pharmacoengineering
- Regenerative Medicine
- Rehabilitation Engineering
- · Biosignals and Imaging
- Medical Microdevices

Any semester*

2 GEP Social Sciences (from different disciplines)	1. Economics ☐ EC 201 or ☐ EC 205 or ☐ ARE 201	2.
2 GEP Interdisciplinary Perspectives	1. E 102	2. PHI/STS 325
2 GEP Humanities (from different disciplines)	1.	2.
1 GEP Additional Breadth	1.	
Corequisites (Not Additional Courses) US Diversity (USD) Global Knowledge (GK)	1.	2.
2 Health and Exercise Studies	1. (Must be 100-level)	2.

*General Education Program (GEP) requirements and GEP Footnotes:

To complete the requirements for graduation and the General Education Program, the following category credit hours and corequisites must be satisfied. University approved GEP course lists for each of the following categories can be found at: http://oucc.ncsu.edu/gep-courses

Humanities (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Humanities course list.

<u>Social Sciences</u> (6 credit hours selected from two different disciplines/course prefixed)

Choose 3 credits from the University approved GEP Social Sciences course list in a discipline other than Economics. Economics 205 (or EC 201 or ARE 201), taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.

Health & Exercise Studies (2 credit hours – must include one HESF 100-level course)

Choose from the University approved GEP Health & Exercise Studies course list.

Additional Breadth (3 credit hours to be selected from the University approved GEP course lists)

Choose from the Humanities/Social Sciences/Visual Performing Arts

Interdisciplinary Perspectives (5-6 credit hours)

Choose from the University approved GEP Interdisciplinary Perspectives course list.

The following **Co-Requisites** must be satisfied to complete the GEP requirements:

I. <u>U.S. Diversity</u> (USD)

Choose from the University approved GEP US Diversity course list or choose a course identified on the approved GEP course lists as meeting the US Diversity (USD) co-requisite.

J. Global Knowledge (GK)

Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.

K. **Foreign Language Proficiency** Proficiency at the FL_102 level is required for graduation.