BSME Mechanical Engineering
Fall 2018

This document is an example of a BSME program of study. Several factors can affect the course scheduling sequence. For a copy of the official curriculum, please go to the UGA Bulletin: **http://bulletin.uga.edu/**

Major Requirements
Students must earn a grade of "C" (2.0) or better in the courses indicated in **bold**.

High Demand Entrance Requirements
To be considered as a candidate for BSME, students must complete the courses listed in *italics* with a grade of "C" (2.0) or better. For more information on entrance requirements, please refer to the UGA Bulletin: **http://bulletin.uga.edu/** and our website.

YEAR ONE

Fall Semester		Hours	Spring Semester		Hours
MATH 2250	***Calculus I***	4	***MATH 2260***	***Calculus II***	4
ENGR 1920	Intro to Engineering	1	***PHYS 1251***	***Physics for Engineers I***	3
ENGR 1120	***Engineering Graphics***	2	***ENGR 1140***	***Computational Engr. Methods***	2
ENGL 1101	***English Composition I***	3	MCHE 1940	ME Design Studio/Prof. Practice	3
COMM 1110[1]	Intro to Public Speaking	3	ENGL 1102	English Composition II	3
	Social Sciences Elective	3			
FYOS	First-Year Odyssey Seminar	1			
Total Credit Hours		**17**	**Total Credit Hours**		**15**

YEAR TWO

Fall Semester		Hours	Spring Semester		Hours
MATH 2500	**Multivariable Calculus**	3	**MATH 2700**	**Differential Equations**	3
PHYS 1252	**Physics for Engineers II**	3	**ENGR 2140**	**Strength of Materials**	3
ENGR 2120	***Statics***	3	**ENGR 3140**	**Thermodynamics I**	3
CHEM 1211&L	**Freshman Chemistry I**	4	**ENGR 2130**	**Dynamics**	3
	Social Sciences Elective	3	**ENGR 2170**	**Electrical Circuits**	3
Total Credit Hours		**16**	**Total Credit Hours**		**15**

YEAR THREE

Fall Semester		Hours	Spring Semester		Hours
ENGR 3160	**Fluid Mechanics**	3	**ENGR 3150**	**Heat Transfer**	3
MCHE 2990	Engineered Systems in Society	3	MCHE 4000	ME Professional Practice	2
MCHE 3300	Machine Design I	3	MCHE 3450	ME Lab	2
MCHE 3310	Engineering Materials	3	ELEE 4220	Feedback Control Systems	3
ELEE 4210	Linear Systems	3		Mechanical Engineering Elective	3
CVLE 2710	Numerical Methods for Engineers	2		World Lang & Culture Elective	3
Total Credit Hours		**17**	**Total Credit Hours**		**16**

YEAR FOUR

Fall Semester		Hours	Spring Semester		Hours
MCHE 4910	ME Capstone Design Project I	2	MCHE 4920	ME Capstone Design Project II	2
MCHE 3920	Design Studio	3		Mechanical Engineering Elective	3
	Mechanical Engineering Elective	3		Mechanical Engineering Elective	3
	Major Related Elective[2]	3		Mechanical Engineering Elective	3
	Life Science Elective[3]	3		Social Sciences Elective	3
	World Lang & Culture Elective	3		World Lang & Culture Elective	3
Total Credit Hours		**17**	**Total Credit Hours**		**17**

[1] COMM 1110 is required for BSME; it will also satisfy the Humanities & The Arts requirement.
[2]Major-Related Elective: Select a course from another discipline or Engineering major. Course must be at the 3000-level or higher except for a language course that is not applied to the General Education core. Co-ops and CURO Research may also count. For complete information on these options, please go to the UGA Bulletin: **http://bulletin.uga.edu/**
[3]Life Science Elective: Select from BIOL 1103 or BIOL 1104 or BIOL 1107&L or BIOL 1108&L.

Mechanical Engineering Electives

Choose five (5) courses from the list below (15 credit hours). The courses are grouped into related topical areas to assist if a student desired to concentrate in one area. (Note that some courses are included in more than one topical area).

Advanced Energy Systems	
ENGR 4490/6490	Renewable Energy Engineering
ENVE 4230/6230	Energy in Nature, Civilization & Engineering
ENVE 4250/6250	Energy Systems & The Environment
ENVE 4530/6530	Energy & Environmental Policy Analysis
MCHE 3150	Engineering Thermodynamics II
MCHE 4650/6650	HVAC Systems for Buildings and Industry
MIST 4550/6550	Energy Informatics

Advanced Mechanics	
BIOE 4760/6760	Biomechanics
CSEE 4310	Embedded Robotics
CSEE 4320	Mechatronics Systems Engineering
ENGR 4350/6350	Intro to Finite Element Analysis
MCHE 4300	Mechanical Systems
MCHE 4360/6360	Robotic Manipulators
MCHE 4380	Solid Mechanics
MCHE 4390	Mechanical Vibration
MCHE 4500/6500	Advanced Thermal Fluid Systems
MCHE 4810	Intro to Micro and Nano Systems

Architectural Engineering	
CVLE 3610	Structural Design
CVLE/MCHE 4720	Engr. Design of Residential Structures
CVLE 4750	Building Information Modeling (BIM)
CVLE/MCHE/LAND 4660/6660	Sustainable Building Design
MCHE 4650/6650	HVAC Systems for Buildings and Industry
MIST 4550/6550	Energy Informatics

Industrial Design and Processes	
AENG 3540	Physical Unit Operations
CSEE 4310	Embedded Robotics
ELEE 4230/6230	Sensors & Transducers
ELEE 4540/6540	Applied Machine Vison
MCHE 3150	Engineering Thermodynamics II
MCHE 4340	Machine Hydraulics
MCHE 4390	Mechanical Vibration
MCHE 4500/6500	Advanced Thermal Fluid Systems
MCHE 4650/6650	HVAC Systems for Buildings and Industry

Modeling and Controls	
CSEE 4320	Mechatronics Systems Engineering
CVLE 4750	Building Information Modeling (BIM)
ELEE 4230/6230	Sensors & Transducers
ELEE 4240	Intro to Microcontrollers
ELEE 4250/6250	Advanced Microcontrollers
ENGR 4350/6350	Intro to Finite Elements Analysis
INFO 4150	Engineering Informatics
MCHE 4360/6360	Robotic Manipulators
MCHE 4650/6650	HVAC Systems for Buildings and Industry
MIST 4550/6550	Energy Informatics