Grove City College Status Sheet

Status Sheets are provided as a convenience for the student and may be helpful for recording completed courses. However, the College Bulletin is the controlling authority on all requirements. Questions should be directed to your academic advisor or the Registrar.

B.S. in Mechanical Engineering
Entering in 2018

(WI)=Writing Intensive, (SI)=Speaking Intensive, (IL)=Information Literacy courses.

(REVISED 06-01-18)

Name:_____

ID# _____ Date: _____

Year of Anticipated Graduation: _____ Advisor: _____

TOTAL HOURS REQUIRED FOR THIS DEGREE---------- 128 HOURS

General Education + Elective Requirements---------- 28 HOURS

Minimum CQPA and MQPA required for graduation----------2.00

MQPA Courses--MECE; ROBO; ELEE 210; ENGR 156, 320, 390, and 402

Major Requirements----------100 HOURS

GENERAL EDUCATION REQUIREMENTS---------- 25 HOURS

HUMANITIES CORE---------- 15 HOURS

		Cr.	Sem. Taken	Grade
HUMA 102	Civ and the Biblical Revelation (IL)*	3		
HUMA 200	Western Civilization	3		
HUMA 202	Civilization and Literature	3		
HUMA 301	Civilization and the Arts	3		
HUMA 303	Christianity and Civilization	3		

*The year-long sequence of RELI 211 and 212 may substitute for this course.

WRITING REQUIREMENT---------- 3 HOURS

WRIT 101	Found. of Academic Discourse (IL)	3		

STUDIES IN SCIENCE, FAITH, & TECHNOLOGY (SSFT)---------- 2 HOURS

Choose one course from the following:

COMP 205/SSFT 205 Ethics, Faith, and the Conscious Mind

PHIL 243 Science and the Human: Inquiry, Design, & the Person

SSFT 210 Science & Religion

SSFT 212 Science, Faith, Technology, & Origins

2

FOUNDATIONS OF THE SOCIAL SCIENCES---------- 3 HOURS

Choose one course from the following:

ECON 120	Foundations of Economics	PSYC 101	Foundations of Psychology
HIST 120	Foundations of History	PSYC 200	Cross-Cultural Psychology
HIST 141	World Geography	SOCI 101	Foundations of Sociology
HIST 204	Hist/Phil Foundations of Education	SOCI 103	Found. of Cultural Anthr.
POLS 101	Foundations of Political Science	SOCW 101	Found. of Social Work

3

QUANTITATIVE/LOGICAL REASONING---------- 0 HOURS

Satisfied by major-related requirements.

NATURAL SCIENCES (with labs)---------- 0 HOURS

Satisfied by major-related requirements.

PHYSICAL EDUCATION---------- 2 HOURS

PHYE 101 (men) / 111 (women)		1		
PHYE 102 (men) / 112 (women)		1		

GENERAL ELECTIVES---------- 3 HOURS

MAJOR-RELATED REQUIREMENTS----------39-40 HOURS

CHEM 105	Chemistry for Engineers	4		
ELEE 210	Electrical Engineering	3		
ENGR 156	Introduction to Engineering	2		
ENGR 274	Math Methods in Engineering	3		
ENGR 402	Engineering Economy	1		
Math/Science Elective		3 or 4		

(ASTR 206, 207; BIOL 101,102; CHEM 102, 227, 241, 345; MATH 210, 213, 222, 331; PHYS 234)

MATH 161	Calculus I	4		
MATH 162	Calculus II	4		
MATH 261	Calculus III	4		
MATH 262	Differential Equations	3		
PHYS 101	General Physics I	4		
PHYS 102	General Physics II	4		

MECHANICAL ENGINEERING REQUIREMENTS---------- 48 HOURS

		Cr.	Sem. Taken	Grade
MECE 107	Engineering Graphics	2		
MECE 109	Intro to Solid Modeling	2		
MECE 120	Numerical Comp. for Mech. Engr.	3		
MECE 201	Fundamentals of Material Science	3		
MECE 210	Design for Manufacturing	3		
MECE 211	Mechanics I	3		
MECE 212	Mechanics II	3		
MECE 214	Thermodynamics	3		
MECE 251	Mechanical Systems Lab I (IL)	1		
MECE 252	Mechanical Systems Lab II	1		
MECE 311	Mechanics of Materials	3		
MECE 312	Stress Analysis/Design of Mach. Comp.	3		
MECE 316	System Dynamics	3		
MECE 325	Fluid Mechanics	3		
MECE 326	Heat Transfer	3		
MECE 351	Instrumentation Lab (WI)	1		
MECE 352	Thermal / Fluids Lab	1		
MECE 401	Capstone Design I	3		
MECE/ROBO 451	Capstone Design Lab I	1		
MECE/ROBO 452	Capstone Design Lab II (SI)	3		

Select a minimum of 3 credit hours from each system area:---------- 13 HOURS

At least 6 credit hours must be 400 level classes and a maximum of 4 credits hours from one and two credit courses.

MECHANICAL SYSTEMS ELECTIVES:

MECE 303	Computer-Aided Manufacturing	3		
MECE 390	Special Mechancial Engineering Topics	1-4		
MECE 407	Control Systems	3		
MECE 408	Mechanical Vibrations	3		
MECE 410	Kinematics & Dynamics of Mach.	3		
MECE 415	Finite Element Analysis	3		
MECE 418	Human-Powered Vehicle Design	3		
MECE 428	Biomechanics	3		
MECE 498	Honors in Mechanical Engineering	1-3		
ENGR 390	Speicial Topics in Engineering	1-3		
ROBO 301	Introduction to Robotics	3		
ROBO 302	Mobile Robots	3		

THERMAL SYSTEMS ELECTIVES:

MECE 321	Advanced Thermodynamics	3		
MECE 391	Special Mechancial Engineering Topics	1-4		
MECE 414	Principles of HVAC	3		
MECE 416	Survey of Alternative Energy Systems	3		
MECE 421	Applied Fluid Mechanics	3		
MECE 499	Honors in Mechanical Engineering	1-3		
ENGR 320	Separation Processes	3		

MECHANICAL OR THERMAL SYSTEMS ELECTIVES:

MECE 260/360/460**	Independent Study	1-3		
MECE 270/370/470**	Independent Research	1-3		
MECE 331	Engr. Mgt. & Cross-Cultural Comm	3		
ENGR 301	Ethics in Engineering and Robotics	1		

* A combined total of up to three credit hours for independent study, independent research, & honors courses can be applied towards the mechanical engineering elective requirement.

SUGGESTED FOUR-YEAR PLAN for the BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Freshman Year

Fall	Credits	Spring	Credits
Chemistry 105	4	Engineering 156	2
Mathematics 161	4	Mathematics 162	4
Mechanical Engineering 107	2	Mechanical Engineering 120	3
Mechanical Engineering 109	2	Physics 101	4
Humanities 102	3	Writing 101	3
Physical Education 101 (men)/111 (women)	1	Physical Education 102 (men)/112 (women)	1
	16		17

Sophomore Year

Fall	Credits	Spring	Credits
Mathematics 261	4	Mathematics 262	3
Mechanical Engineering 201	3	Mechanical Engineering 210	3
Mechanical Engineering 211	3	Mechanical Engineering 212	3
Mechanical Engineering 251	1	Mechanical Engineering 214	3
Physics 102	4	Mechanical Engineering 252	1
SSFT course*	2	Humanities 202*	3
	17		16

Junior Year

Fall	Credits	Spring	Credits
Mechanical Engineering 311	3	Mechanical Engineering 312	3
Mechanical Engineering 325	3	Mechanical Engineering 316	3
Mechanical Engineering 351	1	Mechanical Engineering 326	3
Math/Science Elective*	3	Mechanical Engineering 352	1
Engineering 274	3	Electrical Engineering 210	3
Humanities 200*	3	Foundations of Social Science course*	3
	16		16

Senior Year

Fall	Credits	Spring	Credits
Mechanical Engineering 401	3	Mechanical Engineering or Robotics 452	3
Mechanical Engineering or Robotics 451	1	Mechanical Engineering Electives*	4
Mechanical Engineering Electives*	9	Engineering 402	1
Humanities 301*	3	Humanities 303*	3
	16	General Elective*	3
			14

*Marked courses are not restricted to the time slots as shown in this suggested schedule.

NOTE: Scheduling time conflicts may occur for students who deviate from the above plan. Any exception to the classes listed on the other side of the page must have prior written approval of the department chairman.

TOTAL CREDIT HOURS REQUIRED = 128