

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.

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

B.S. in Electrical Engineering Entering in 2024

(REVISED 07-12-2024)

Name: _____

ID# _____

Year of Anticipated Graduation: _____

Date: _____

Advisor: _____

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

General Education + Elective Requirements----- 30 HOURS

GENERAL EDUCATION REQUIREMENTS----- 24 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 (W/IL)	3	_____	_____
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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----- 1 HOURS

PHYE 100 Healthful Living	1	_____	_____
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GENERAL ELECTIVES----- 6 HOURS

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

Math/Science Core----- 30-31 HOURS

CHEM 105 Chemistry for Engineers <u>or</u>			
BIOL 101 General Biology I	4	_____	_____
ENGR 274 Math Methods in Engineering <u>or</u>			
MATH 214 Applied Prob. & Linear Algebra	3-4	_____	_____
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	_____	_____

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

MQPA Courses-----ELEE; COMP; ENGR; ROBO

Major Requirements-----98 HOURS

ELECTRICAL / COMPUTER ENGINEERING CORE----- 36 HOURS

	Cr.	Sem. Taken	Grade
COMP 141 Computer Programming I	3	_____	_____
ELEE 201 Linear Circuits I	3	_____	_____
ELEE 202 Linear Circuits II (IL)	3	_____	_____
ELEE 204 Digital Logic	3	_____	_____
ELEE 221 Signal Analysis	3	_____	_____
ELEE 251 Lab Skills and Prototyping (IL)	1	_____	_____
ELEE 301 Electronics I	3	_____	_____
ELEE 302 Electronics II	3	_____	_____
ELEE 303 Electric Machines	3	_____	_____
ELEE 304 Electromagnetic Theory	3	_____	_____
ELEE 351 Lab Design Experiences (IL)	1	_____	_____
ENGR 401 Engineering Design (W/SI)	3	_____	_____
ENGR 451 Capstone Design Laboratory I (SI)	1	_____	_____
ENGR 452 Capstone Design Laboratory II (SI)	3	_____	_____

CONCENTRATION REQUIREMENT (Choose one of the following)----- 13 HOURS

Automation Concentration:

ELEE 310 Microcontrollers	3	_____	_____
ENGR 217 Mechatronics II	3	_____	_____
ENGR 305 Labview	1	_____	_____
ENGR 411 Control Systems	3	_____	_____
ENGR 412 Modern Control Theory	3	_____	_____

Communications Concentration:

COMP 342 Data Communication and Networking	3	_____	_____
ELEE 404 Electromagnetic Energy Transmission	3	_____	_____
ELEE 416 Antenna Analysis and Design	1	_____	_____
ELEE 431 Communications Systems I	3	_____	_____
ELEE 432 Communications Systems II	3	_____	_____

Technical Entrepreneurship:

ELEE 431 Communications Systems I	3	_____	_____
ENGR 411 Control Systems	3	_____	_____
ENTR 304 Intellectual Property Protection	1	_____	_____
ENTR 466 Business Planning	3	_____	_____
ENTR 201 Lean Launchpad <u>OR</u>			
ENTR 303 Law for Entrepreneurs	3	_____	_____

Technical Electives----- 9-10 HOURS

Choose 9-10 hours from any 200-400 level ELEE, ENGR, ROBO, MECE, or COMP course (excluding ENGR 216 and COMP 205).

Engineering (ENGR) Core----- 9 HOURS

ENGR 120 Numerical Computing for Engineers	3	_____	_____
ENGR 156 Introduction to Engineering	2	_____	_____
ENGR 301 Ethics in Engineering and Robots	1	_____	_____
ENGR 402 Engineering Economy	1	_____	_____
MECE 109 Intro to Solid Modeling <u>OR</u>			
ENGR 209 SolidWorks: Modeling and Simulation	2	_____	_____

MAJOR-RELATED REQUIREMENTS CONTINUED-----

PHYS 102 General Physics II	4	_____	_____
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SAMPLE FOUR-YEAR PLAN for the BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Freshman Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
MATH 161 Calculus I.....	4	MATH 162 Calculus II	4
PHYS 101 General Physics I.....	4	PHYS 102 General Physics II.....	4
HUMA 102 Civ and the Biblical Revelation.....	3	WRIT 101 Foundations of Academic Discourse.....	3
ENGR 120 Numerical Computing for Engineers.....	3	PHYE 100 Healthful Living.....	1
ENGR 156 Intro to Engineering.....	<u>2</u>	COMP 141 Computer Programming I.....	<u>3</u>
	16		15

Sophomore Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
MATH 261 Calculus III.....	4	MATH 262 Differential Equations	3
ELEE 201 Linear Circuits I.....	3	ELEE 202 Linear Circuits II.....	3
ELEE 251 Lab Skills and Prototyping.....	1	ELEE 204 Digital Logic	3
CHEM 105 Chem for Engr/BIOLOGY 101 Gen. Biology.....	4	ELEE 221 Signal Analysis.....	3
HUMA 200 Western Civilization.....	3	MECE 109 or ENGR 209.....	2
SSFT Course.....	<u>2</u>	HUMA 202 Civilization and Literature.....	<u>3</u>
	17		17

Junior Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
ELEE 301 Electronics I.....	3	ELEE 302 Electronics II.....	3
ELEE 303 Electrical Machines.....	3	ELEE 304 Electromagnetic Theory.....	3
ELEE 351 Lab Design Experiences.....	1	ENGR 274 Math Methods in Engr/MATH 214 Applied Prob.....	3 - 4
ENGR 301 Ethics in Engineering and Robotics.....	1	Concentration Course.....	3
Concentration Course.....	3	Concentration Course.....	1
Foundations of Social Science Course.....	<u>3</u>	HUMA 301 Civilization and the Arts.....	<u>3</u>
	14		16 - 17

Senior Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
ENGR 401 Engineering Design.....	3	ENGR 452 Capstone Design Project II.....	3
ENGR 451 Capstone Design Project I.....	1	ENGR 402 Engineering Economy.....	1
Concentration Course.....	3	Concentration Course.....	3
Technical Electives.....	6-7	Technical Electives.....	3
General Electives.....	<u>3</u>	HUMA 303 Christianity and Civilization.....	3
	16-17	General Electives.....	<u>3</u>
			16

*Technical electives can be any 200-400 level ELEE, ENGR, ROBO, MECE, or COMP course, excluding ENGR 216 and COMP 205.

Students are expected to use this status sheet in conjunction with the College *Bulletin* and to contact their advisors for a detailed schedule of courses recommended to meet requirements for this major.

TOTAL CREDIT HOURS REQUIRED = 128