

Engineering Management

2023-2024 Bachelor of Science Requirements – minimum 130 Credit Hours

Freshman Year

Fall Semester	Credits	Spring Semester	Credits
XXXX 193 First Year Seminar ¹	3	MATH 258 Calculus & Analytical Geometry II	4
CHEM 101 General Chemistry I	3	PHYS 121 Physics I	4
CHEM 101L General Chemistry I Lab	1	PHYS 121 Physics I Lab	1
MATH 157 Calculus & Analytical Geometry I	4	PHIL 201 Human Nature	3
PHIL 101 Reasoning	3	ENGL 101 Writing (WE)	3
COMM 100 Communication & Speech	3	RELI xxx Christianity & Catholic Traditions ¹	3
Total Credits	17	Total Credits	18

Sophomore Year

Fall Semester	Credits	Spring Semester	Credits
MENG 221 Materials Engineering	3	ENSC 301 Mechanics of Materials	3
ENSC 205 Statics	3	MATH 260 Ordinary Differential Equations	3
MATH 259 Calculus & Analytical Geometry III	4	MATH 321 Statistics for Experimentalists	3
PHYS 122 Physics II	4	RELI xxx World/Comparative Religion (GS) ¹	3
PHYS 122L Physics II Lab	1	PHIL 301 Ethics or RELI Ethics ¹	3
ECON 200 Economic Analysis ²	3	Total Credits	15
Total Credits	18		

Junior Year

Fall Semester	Credits	Spring Semester	Credits
XXXX 1 st Pathways Course ³	3	XXXX 2 nd Pathways Course ³	3
CPSC xxx Approved Computing Course ³	3	XXXX 3 rd Pathways Course ³	3
ENGM 310 Systems Engineering Management	3	ENSC 244 Computer Methods for Engineers	3
EENG 201 Circuit Analysis I	3	XXXX Business for Engineering Tech Elective ³	3
EENG 201 Circuit Analysis I Lab	1	BFIN 320 Principles of Finance	3
ACCT 263 Accounting Analysis	3	BUSN 283 Business Law	3
Total Credits	16	Total Credits	18

Senior Year

Fall Semester	Credits	Spring Semester	Credits
ENSC 491 Senior Design Project I	2	ENSC 492 Senior Design Project II (WE, FA)	3
XXXX 4 th Pathways Course ³	3	XXXX 6 th Pathways Course ³	3
XXXX 5 th Pathways Course ³	3	XXXX 7 th Pathways Course (if required) ³	3
ENGM 405 Engineering Project Management	3	ENSC 355 Thermal Science (spring odd years)	3
XXXX 1 st Broadening CORE Requirement ²	3	ENSC 400 Fundamentals of Eng Exam	0
Total Credits	14	XXXX 432 CORE Integration Seminar ¹	3
		Total Credits	15

¹ Refer to Gonzaga CORE requirements for options.

² ECON 200 counts as a Social/Behavioral Sciences course. Select one additional broadening course from History or Literature.

³ See back for guidelines on Pathways and Business for Engineering Technologies Electives.

Engineering Management Pathways

Pathways must meet the following requirements:

- Each pathway must include at least three engineering 4xx courses or computer science (CPSC) 3xx/4xx courses.
- Each course or course/lab combination must count for at least 3 credits.
- The total credit count of all pathway courses must add up to at least 20 credits.

Pathways with multiple 4-credit courses or course/lab combinations will not require a 7th course.

This Degree Worksheet is a general guide based on 3-credit pathway courses.

Please plan ahead, keeping each semester's credit load in mind.

Minor in Business for Engineering Technologies Electives

Choose one in the spring of even years:

- BENT 490 Creativity, Innovation, and Entrepreneurship
- ECON 324 Economics of Environmental Protection
- MGMT 350 Principles of Management
- MKTG 310 Principles of Marketing
- OPER 340 Operations Management

Approved Computing Course

Choose one from the following options. Additional courses may be offered; please see your advisor.

- CPSC 121 Computer Science I
- CPSC 214 Intro to Programming with Python
- CPSC 222 Introduction to Data Science