



MECHANICAL ENGINEERING CONCENTRATION MODEL PROGRAM

FIRST
YEAR

- Fall (16)**
- 4 Chemistry 103 General Chemistry I (F)
 - 2 Engineering 101 Intro to Engineering Design (F)
 - 2 Engineering 181 Engineering Graphical Communication Lab (F)
 - 4 Mathematics 161 Differential and Integral Calculus (F, S)
 - 3 English 101 Written Rhetoric
 - (1) Interdisciplinary 149 First Year Prelude

Interim (3)

- 3 Interdisciplinary 150 Developing a Christian Mind

Spring (17)

- 4 Engineering 106 Engineering Chemistry and Materials Science (S)
- 4 Mathematics 162 Tech. of Integration, Intro to Infinite Series, & Multivariate Calculus (F, S)
- 4 Physics 133 Intro Physics: Mechanics and Gravity (F, S)
- 4 History 151 or 152 History of the West and the World
- 1 Health & Fitness (PER 101-129)

SECOND YEAR

- Fall (17)**
- 4 Engineering 209 Intro. to Conservation Laws & Thermodynamics (F, S)
 - 4 Mathematics 231 Differential Equations with Linear Algebra (F, S)
 - 4 Physics 235 Intro Physics: Electricity and Magnetism (F)
 - 2 Computer Sci.104 Applied C++ (F)
 - 3-4 Economics 151 or 221 Principles of Economics/Principles of Microeconomics
 - 0 Internship Workshop (must sign up with Prof. Nielsen)

Interim (4)

- 3 Free Elective (or consider taking CAS 101 here in place of IDIS102 later)

Spring (16)

- 4 Engineering 202 Statics and Dynamics (F, S)
- 4 Engineering 204 Circuit Analysis and Electronics (S)
- 4 Mathematics 232 Engineering Mathematics (F, S)
- 3 Religion 121 or Religion 131
- 1 Health & Fitness (PER 130-159) (or during interim)

THIRD YEAR

- Fall (17)**
- 4 Engineering 305 Mechanics of Materials (F)
 - 4 Engineering 319 Intro. to Thermal/Fluid Sciences (F)
 - 4 Elective: Basic Science or Advanced Math
 - 3 Philosophy 153 Fundamental Questions in Philosophy
 - 2 IDIS 102 Oral Rhetoric for Engineers (F, S), (or take CAS 101 during Interim)

Interim (3)

- 3 Cross-Cultural Engagement

Spring (16)

- 4 Engineering 322 Machine Design (S)
- 4 Engineering 328 Intermediate Thermal/Fluid Sciences & Design (S)
- 3 Engineering 334 Dynamics of Machinery (S)
- 1 Engineering 382 Engineering Instrumentation Laboratory (S)
- 3 The Arts
- 1 Health & Fitness (PER 160-189)

FOURTH YEAR

- Fall (15)**
- 4 Engineering 333 Thermal Systems Design (F)
 - 2 Engineering 339 Senior Design Project (F)
 - 4 Elective: Basic Science, Advanced Math, or Engineering Elective
 - 2 Business 357 Business Aspects for Engineers (F)
 - 3 Literature

Interim (3)

- 3 Engineering Special Topics Elective

Spring (14)

- 4 Engineering 324 Materials & Processes in Manufacturing (S)
- 4 Engineering 340 Senior Design Project (S)
- 3 Engineering Elective (Minimum of 3 credits – see catalog for restrictions)
- 3 Free Elective

Other Requirements

- 0-8 Foreign Language (2 years of high school or 1 year of college)

HONORS Students:
Engr 294/394 and Engr 385
are required for students seeking to
graduate with honors. Speak with
your advisor or consult the catalog
for more details.

Pink listings (core courses) may be swapped as long all are completed by the end of the senior year.
See Elective Options sheet for elective courses highlighted in green, red and blue.