

University of the Incarnate Word[®] Bachelor of Science in **Engineering** **Management Concentration**

School of Mathematics, Science and Engineering

PROGRAM OVERVIEW

The Bachelor of Science (B.S.) in Engineering in the School of Mathematics, Science and Engineering at the University of the Incarnate Word develops highly skilled, highly educated engineering professionals ready to succeed in the lab, in the field or in the C-suite.

The B.S. in Engineering combines a strong core of math, science and engineering courses with intensive study in one of four tracks. Students can choose from electrical, mechanical, management and mechatronics concentrations based on their career or academic goals.

The Management concentration is an interdisciplinary program that integrates a comprehensive engineering education with business courses in economics, accounting, management and financial management, which all together prepare students for careers as managers and administrators in engineering and technology firms.

Engineering students also have the opportunity to work with faculty on ongoing research projects — among them Unmanned Aircraft Systems (UAS) as part of the department's Autonomous Vehicle Systems (AVS) Lab.

The Capstone course challenges students to apply their engineering education and apply it as a solution or innovation to a contemporary issue.

ADMISSION REQUIREMENTS

The requirements for admission to the B.S. in Engineering program are the same as the requirements for admission to the University of the Incarnate Word.

CONTACT

UIW Admissions
(210) 829-6005
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Engineering - Management (B.S.)

B.S. in Engineering - Management**FRESHMAN YEAR****Fall**

CHEM 1301: Chemical Principles I (3 hours)
 CHEM 1101: Chemical Principles I Lab (1 hour)
 MATH 2312: Calculus I (3 hours)
 ENGL 1311: Composition I (3 hours)
 ENGR 1201: Intro to Engineering (2 hours)
 FYES 1211: First Year Experience Seminar (2 hours)

Total Hours: 14**Spring**

MATH 2313: Calculus II (3 hours)
 ENGR 2330: Engineering Prob. & Statistics (3 hours)
 ENGR 1310: Engineering Graphics CAD I (3 hours)
 ENGL 1312: Composition II (3 hours)
 PEHP Physical Education (1 hour)
 ECON 2301: Macroeconomics (3 hours)

Total Hours: 16**SOPHOMORE YEAR****Fall**

MATH 2322: Linear Algebra (3 hours)
 ENGL 2310: World Literature Studies (3 hours)
 ENGR 2305: Engineering Physics I (3 hours)
 ENGR 2105: Engineering Physics I Lab (1 hour)
 ENGR 2340: Computer Programming (3 hours)
 Modern Language I (3 hours)

Total Hours: 16**Spring**

ENGR 3350: Statics (3 hours)
 ENGR 2106: Engineering Physics II Lab (1 hour)
 ENGR 2306: Engineering Physics II (3 hours)
 PHIL 1381: Intro to Philosophy (3 hours)
 MATH 2314: Differential Equations (3 hours)
 Modern Language II (3 hours)

Total Hours: 16**JUNIOR YEAR****Fall**

ENGR 3330: Engineering Analysis (3 hours)
 Upper Level Engineering Elective (3 hours)
 ENGR 3340: Numerical Methods and Advanced
 Programming (3 hours)
 ECON 2302: Microeconomics (3 hours)
 ENGR 3355: Mechanics of Materials (3 hours)
 ENGR 3155: Mechanics of Materials Lab (1 hour)

Total Hours: 16**Spring**

Fine Arts (3 hours)
 ENGR 4370: Fluid Mechanics (3 hours)
 ENGR 4170: Fluid Mechanics Lab (1 hour)
 ACCT 2311: Principles of Accounting (3 hours)
 RELS 1305, 1315, 1325, or 1327H (3 hours)
 ENGR 2360: Circuit Analysis (3 hours)
 ENGR 2160: Circuit Analysis Lab (1 hour)

Total Hours: 17**SENIOR YEAR****Fall**

MATH 3314: Calculus III (3 hours)
 Upper-Level Engineering Elective (3 hours)
 ENGR 4375: Thermodynamics (3 hours)
 BMGT 3371: Management Science (3 hours)
 ENGR 3362: Electronics (3 hours)
 ENGR 3162: Electronics Lab (1 hour)
 ENGR 4180: Senior Design (1 hour)

Total Hours: 17**Spring**

HIST 1311, 1312, 1321, or 1322 (3 hours)
 Upper Level RELS or PHIL (3 hours)
 BFIN 3321: Principles of Financial Management
 (3 hours)
 ENGR 4380: Senior Design 2 (3 hours)
 Upper-Level Engineering Elective (3 hours)

Total Hours: 15

127 hours needed to complete the B.S. in Engineering with a Management concentration.