

Mechatronics and Robotics Engineering, B.S. Curriculum

Engineering

| | | |
|------------|--|---|
| EGR 1600 | Engineering Problem Solving | 1 |
| EGR 1710 | Engineering Graphics and Design | 3 |
| EGR 4400 | Professional Practice | 3 |
| EGR 4820 | Computer Integrated Manufacturing | 2 |
| ECE 1000 | Intro to Curcuit Simulation and PCB Design | 3 |
| ECE 1100 | C Programming | 3 |
| ECE 2000 | Digital Systems Design I w/lab | 4 |
| ECE 2100 | Curcuit Analysis I | 3 |
| ECE 2200 | Curcuit Analysis II | 3 |
| ECE 2300 | Electronics I | 3 |
| ECE 3100 | Linear Controls | 3 |
| ECE 3700 | Embedded Systems | 3 |
| ME 3110 | Theory of Machines | 3 |
| ME 3400 | Mechanical Engineering Design I | 3 |
| ME 3410 | Mechanical Engineering Design II | 3 |
| EM 2010 | Statics | 3 |
| EM 2020 | Dynamics | 3 |
| EM 3100 | Mechanics of Materials w/lab | 4 |
| MRE 3100 | Intro to Mechatronics | 3 |
| MRE 4100 | Robotics-Dynamics and Control | 3 |
| MRE 4960 | MRE Senior Project I | 2 |
| MRE 4961 | MRE Senior Project II | 2 |
| MET 2000 | ME Measurement and Instrumentation | 3 |
| MET 3500 | Food Mechanics and Hydraulic Machines | 3 |
| TECH ELECT | Technical Elective | 6 |

English

| | | |
|----------|----------------------------|---|
| ENG 1252 | Argumentative Writing | 3 |
| ENG 1272 | Analytical Writing | 3 |
| EGR 2000 | Engineering Communications | 3 |

Humanities and Social Sciences

| | | |
|--|--|---|
| HUM ELECT | Electives (3 credits must be literature) | 9 |
| PSY 1700 | Introduction to Psychology | 3 |
| <i>One of the two following courses</i> | | |
| SS 2720 | Group Dynamics | 3 |
| SS 2800 | Introduction to Sociology | 3 |
| <i>One of the two following courses:</i> | | |
| ECON 2210 | Macroeconomics | 3 |
| ECON 2200 | Microeconomics | 3 |

Indiana Tech-specific Coursework

| | | |
|----------|-----------------------|---|
| IIT 1000 | University Experience | 1 |
|----------|-----------------------|---|

Mathematics

| | | |
|---------|---|---|
| MA 1200 | Calculus I | 4 |
| MA 1210 | Calculus II | 4 |
| MA 2100 | Differential Equations and Linear Algebra | 4 |
| MA 2200 | Calculus III | 4 |
| MA 2430 | Probability and Statistics for Engineers | 3 |

Science

| | | |
|---------|--------------------------|---|
| CH 1220 | General Chemistry w/lab | 3 |
| PH 1300 | General Physics I w/lab | 4 |
| PH 2300 | General Physics II w/lab | 4 |