

All students must complete a total of at least 61 credit hours at Ivy Tech Community College of Indiana and at least 68 credit hours at the University of Evansville.

**Ivy Tech Community College of Indiana
Course Work**

Course	Credit Hours
CHM 105 – General Chemistry I	5
COM 102 – Interpersonal Communications/ Speech	3
EGR 116 – Geometric Modeling for Visualization	2
EGR 140 – Introduction to Engineering I	3
EGR 160 – Introduction to Engineering II	3
EGR 190 – Introduction to Engineering Design	2
EGR 251 – Electrical Circuits I	4
EGR 252 – Electrical Circuits II	4
EGR 260 – Vector Mechanics – Statics	3
EGR 261 – Dynamics	3
ENG 111 – English Composition I	3
MAT 211 – Calculus with Analytic Geometry I	4
MAT 212 – Calculus with Analytic Geometry II	4
MAT 261 – Multivariate Calculus	4
MAT 264 – Differential Equations	3
PHY 220 – Mechanics	5
American History or Sociology	3
Philosophy or Introduction to Ethics	3
Total Hours	61

**University of Evansville Course Work
Bachelor of Science in Civil Engineering
(BSCE)**

Course	Credit Hours
CE 183 – Surveying	3
CE 230 – Materials Science	3
CE 232 – Mechanics of Materials	3
CE 324 – Construction Management	3
CE 331 – Construction Materials	3
CE 338 – Soil Mechanics and Soil Behavior	3
CE 339 – Soil Mechanics Laboratory	1
CE 340 – Structural Analysis	3
CE 341 – Design of Steel Structures	3
CE 342 – Design of Concrete Structures	3
CE 350 – Transportation Engineering	3
CE 366 – Fluid Mechanics	3
CE 374 – Environmental Engineering I	3
CE 380 – Hydraulics Laboratory	1
CE 438 – Geotechnical Engineering	3
CE 469 – Design of Hydraulic Structures	3
CE 493 – Civil Engineering Design Project I	2
CE 497 – Civil Engineering Senior Design Project II	4
ENGR 390 – Applied Engineering Mathematics	3
FYS 120 – First Year Seminar II	3
PHYS 211 – Calculus Physics	4
WC 110 – The Ancient World to the Reformation	3
Civil Engineering Technical Elective (400 level)	6
Foreign Language (or proficiency)	6 (0)
General Education	6
Health and Wellness	1
Science Elective	3

**Bachelor of Science in Electrical
Engineering (BSEE)**

Course	Credit Hours
EE 254 – Logic Design	3
EE 310 – Linear Systems and DSP I	3
EE 311 – Linear Systems and DSP II	3
EE 320 – Engineering Electromagnetics	3
EE 342 – Electronics I	3
EE 343 – Electronics II	3
EE 354 – Digital Systems	3
EE 360 – Linear Control Systems	4
EE 380 – Intermediate Electrical Projects Lab	2
EE 413 – Random Signals and Noise	3
EE 421 – Photonics I	3
EE 430 – Energy Conversion Systems	3
EE 454 – Microcontroller Applications	3
EE 470 – Communication Theory	3
EE 494 – Senior Project Seminar	0
EE 495 – Senior Project Phase 1	3
EE 497 – Senior Project Phase 2	3
FYS 120 – First Year Seminar II	3
PHYS 211 – Calculus Physics	4
WC 110 – The Ancient World to the Reformation	3
Electrical Engineering Electives	6
Foreign Language (or proficiency)	6 (0)
General Education	6
Health and Wellness	1
Mathematics Elective	3

**Bachelor of Science in Mechanical
Engineering (BSME)**

Course	Credit Hours
ENGR 390 – Applied Engineering Mathematics	3
FYS 120 – First Year Seminar II	3
ME 230 – Materials Science	3
ME 232 – Mechanics of Materials	3
ME 297 – Integrated Design II	2
ME 318 – Manufacturing Methods	3
ME 330 – Materials Laboratory	1
ME 342 – Machine Analysis	3
ME 344 – Design of Machine Elements	3
ME 360 – Thermo/Fluid Dynamics Laboratory	2
ME 362 – Thermodynamics	4
ME 366 – Fluid Mechanics	3
ME 368 – Heat Transfer	3
ME 397 – Integrated Design III	3
ME 452 – System Modeling and Control	3
ME 495 – Professional Practice I	3
ME 497 – Professional Practice II	3
PHYS 211 – Calculus Physics	4
WC 110 – The Ancient World to the Reformation	3
Foreign Language (or proficiency)	6 (0)
General Education	6
Health and Wellness	1
Mechanical Engineering Electives (400 level)	6
Technical Elective	3