

Associate of Sciences Degree in Science: Engineering – 2 YR Pathway

Industrial & Systems Engineering-VT

| ✓ | Course | Title | Cr | Offered | Pre-Req | Mode | Other Options | Notes |
|------------------------|---------|------------------------------------|--------------|-----------|--------------------------|---------|---------------|---------------------------------|
| First Semester | | | | | | | | |
| | SDV 100 | College Success Skills | 1 | F, SP, SU | | F, H, O | | |
| | ENG 111 | College Composition I | 3 | F, SP, SU | * | F, H, O | | |
| | MTH 173 | Calculus w/Analytic Geometry I | 5 | F, SP | MTH 164 | F | | |
| | EGR 126 | Computer Programming for Engineers | 3 | F, SP, SU | * | F | | |
| | CHM 111 | College Chemistry I | 4 | F, SP, SU | *, MTE 1-9 | F, H, O | | |
| | EGR 120 | Intro to Engineering | 2 | F | | F | | Co-Requisite MTH 173 |
| Second Semester | | | | | | | | |
| | ENG 112 | College Composition II | 3 | F, SP, SU | ENG 111 | F, H, O | | |
| | MTH 174 | Calculus w/Analytic Geometry II | 5 | F, SP | MTH 173 | F | | |
| | EGR 123 | Intro to Engineering Design | 2 | F, SP | MTH 173, EGR 120, 126 | F | | |
| | MTH 285 | Linear Algebra | 3 | SP | | | | Co-Requisite MTH 174 |
| | PED/HLT | Physical Education/Health | 1 | F, SP, SU | | F, H, O | | |
| Third Semester | | | | | | | | |
| | PHY 241 | University Physics I | 4 | F, SP, SU | * | F, H, O | | Co-Requisite MTH 173 |
| | | Social Science Elective | 3 | F, SP, SU | * | F, H, O | | |
| | EGR 206 | Engineering Economics | 3 | F | * | | | EGR 140, 206, 245, 246, 251/255 |
| | EGR 140 | Engineering Mechanics - Statics | 3 | F | MTH 174 | | | EGR 140, 206, 245, 246, 251/255 |
| | EGR 245 | Engineering Mechanics - Dynamics | 3 | F | MTH 174 | | | EGR 140, 206, 245, 246, 251/255 |
| | MTH 277 | Vector Calculus | 4 | F, SP | MTH 174 | | | |
| Fourth Semester | | | | | | | | |
| | PHY 242 | University Physics II | 4 | F, SP, SU | PHY 241 | F, H, O | | Co-Requisite MTH 174 |
| | | Humanities/Fine Arts Elective | 3 | F, SP, SU | * | F, H, O | | |
| | CST | Communication Elective | 4 | F, SP, SU | * | F, H, O | | |
| | | Social Science Elective | 3 | F, SP, SU | * | F, H, O | | |
| | ENG | Literature Elective | 3 | F, SP, SU | ENG 112 | F, H, O | | |
| | MTH 291 | Differential Equations | 3 | F, SP | MTH 174 | | | |
| | | Program Total | 65-72 | | | | | |

*Readiness to enroll in ENG 111

Term Offered: F-Fall, SP-Spring, SU-Summer

Mode: F-Face-to-Face, O-Online, H-Hybrid, D-Distanced to another location