

| PROGRAM ARTICULATION DEGREE PLAN | | | | | |
|---|---|------------|---|---|------------|
| Oakton Community College 2019-2020 | | | | Southern Illinois University Carbondale | |
| AAS Manufacturing Technology - 61 hours | | | | BS Industrial Management and Applied Engineering (IMAE) - 120 hrs | |
| | | | | University Core Curriculum (UCC) Capstone Option - 30 hrs | |
| | | Hrs | | | Hrs |
| | | | UNIV 101 | Saluki Success | NA |
| SPE 103 | Effective Speech | 3 | CMST 101 | Intro to Oral Communication | T |
| EGL 101 | Composition I | 3 | ENGL 101 | English Composition I | T |
| | | | ENGL 102 | English Composition II | NA |
| MAT 140 | College Algebra | 3 | MATH 108 (Required for BS degree) | College Algebra | T |
| SOCIAL/BEHAVIORAL SCIENCE | (See SIUC Equivalency Guide) | 3 | SOCIAL SCIENCE | | T |
| | | | SOCIAL SCIENCE | | 3 |
| HUMANITIES/FINE ARTS | (See SIUC Equivalency Guide) | 3 | HUMANITIES | | T |
| | | | HUMANITIES | | NA |
| PHY 101 -or- PHY 131 | Applied Physics -or- College Physics I | 4 | PHYS 203/253A (Required for BS degree) | College Physics/Lab | T |
| | | | LIFE SCIENCE, GRP II | | 3 |
| | | | FINE ARTS | | 3 |
| | | | HUMAN HEALTH | | NA |
| | | | MULTICULTURAL | | 3 |
| | | 19 | | | 12 |
| *Student must choose courses that fulfill both the Global Studies and U.S. Diversity Studies requirements | | | | | |
| Program Requirements | | | Program Requirements | | |
| CAD 116 | Basic AutoCAD | 3 | The AAS degree in Manufacturing Technology as articulated fulfills the 22 hrs of technical elective course requirements for the BS degree in Industrial Management & Applied Engineering. | | |
| ELT 101 | Introduction to Electronics | 5 | | | |
| MFG 102 | Industrial Drafting and Design | 3 | | | |
| MFG 110 | Introduction to Machining | 3 | | | |
| MFG 135 | Hydraulics, Pneumatics and Controls | 3 | | | |
| MFG 140 | Intro to Robotics & Vision Systems | 4 | | | |
| MFG 141 | CNC Machine Operation - NIMS Test Preparation | 4 | | | |
| MFG 144 | Intro to CNC Programming | 4 | | | |
| MFG 165 | MASTERCAM Computer-Aided Manufacturing | 4 | | | |
| MFG 240 -or- MFG 245 | Programmable Controllers (PLC) -or- Programmable Automation Controllers (PAC) | 4 | | | |
| Choose one course from the following: | | 4 | | | |
| MFG 145 | Advanced CNC Programming | | | | |
| MFG 166 | MASTERCAM Computer Aided Manufacturing II | | | | |
| MFG 250 | Advanced PLC/Automation Applications | | | | |
| PROGRAM ELECTIVES | Choose 4 hours from MFG courses | 4 | | | |
| | | 45 | | | |
| *Recommended program elective to fulfill BS degree requirements | | | | | |
| | | | PHYS 203B/253B | College Physics/Lab | 4 |
| | | | IMAE 110 | Geometric Dimensioning and Tolerancing | 3 |
| | | | IMAE 208 | Manufacturing Processes | 3 |
| | | | IMAE 305 | Industrial Safety | 3 |
| | | | IMAE 307 -or- MATH 140 | Applied Calculus for Technology -or- Short Course in Calculus | 3 |
| | | | IMAE 340 -or- PSYC 323* | Intro to Supervision -or- Organizational Psychology | 3 |
| | | | IMAE 376 | Supply Chain Operations & Logistics | 3 |
| | | | IMAE 390 | Cost Estimating | 3 |
| | | | IMAE 392 | Facilities Planning & Workplace Design | 3 |
| | | | IMAE 442 | Fundamentals of Leadership | 3 |
| | | | IMAE 445 | Computer Integrated Manufacturing | 3 |
| | | | IMAE 450 | Project Management | 3 |
| | | | IMAE 465 | Lean Manufacturing | 3 |
| | | | IMAE 470A | Six Sigma Green Belt I | 3 |
| | | | IMAE 470B | Six Sigma Green Belt II | 3 |
| | | | IMAE 476 | Supply Chain Design & Strategy | 3 |
| | | | IMAE Electives | (Must be at 300/400 level) | 3 |
| | | | | | 52 |
| Total semester hrs completed w/ AAS degree | | 64 | Total semester hrs completed w/ BS degree | | 64 |
| | | | Total hours to BS degree: | | 128 |
| *PSYC 323 is an option for on-campus students only & requires PSYC 102 as a prerequisite | | | | | |