| PROGRAM ARTICULAT       | TION DEGREE PLAN   |     |   |   |                       |
|-------------------------|--|-----|---|---|-----------------------|
| Prairie State College 2 | 2023-2024  |     | Southern Illinois University Carbondale   |   |                       |
| AAS Tool and Die Makin  | ng - 62-63 hrs   |     | BS Industrial Management and Applied Eng  | gineering (IMAE) - 120 hrs  |                       |
|                         |  |     | UNIVERSITY CORE CURRICULUM (UCC   | ) CAPSTONE OPTION - 30 hrs  |                       |
|                         |  | Hrs |   |   | Hrs                   |
|                         |  |     | UNIV 101  | Saluki Success  | NA                    |
| COMM 101                | Principles of Communication                                    | 3   | CMST 101  | Intro:Oral Communication  | T                     |
| ENG 101                 | Composition I  | 3   | ENGL 101  | English Composition I   | T                     |
|                         |  |     | ENGL 102  | English Composition II  | NA                    |
| MATH 151                | College Algebra  | 4   | MATH 108 (required)   | College Algebra   | T                     |
|                         | IAI Social Science   | 3   | SOCIAL SCIENCE  |   | T                     |
|                         |  |     | SOCIAL SCIENCE  |   | 3                     |
|                         | IAI Humanities/Fine Arts                                       | 3   | HUMANITIES  | See SIUC Transfer Equivalency Guide   | T                     |
|                         |  |     | HUMANITIES  |   | NA                    |
| PHYSI 120               | College Physics I  | 4   | PHYS 203A/253A (required)   | College Physics/Lab   | T                     |
| PHYSI 130               | College Physics II   | 4   | PHYS 203B/253B (required)   | College Physics/Lab   | T                     |
|                         |  |     | LIFE SCIENCE  |   | 3                     |
|                         |  |     | FINE ARTS   |   | 3                     |
|                         |  |     | HUMAN HEALTH  |   | NA                    |
|                         |  |     | MULTICULTURAL   |   | 3                     |
|                         |  | 24  |   |   | 12                    |
|                         |  |     | Program Requirements  |   |                       |
| Program Requirements    | S  |     |   |   |                       |
| CADMD 141               | Technical Drafting   | 3   |   |   |                       |
| CADMD 243               | Introduction to AutoCAD  | 3   |   |   |                       |
| CADMD 244               | Intermediate AutoCAD   | 3   |   |   |                       |
| HYDR 101                | Fundamentals of Hydraulics                                     | 2   |   |   |                       |
| HYDR 106                | Pneumatics   | 2   |   |   |                       |
| MILL 101                | Industrial Maintenance Techniques I                            | 2   |   |   |                       |
| MT 101                  | Machining Basics - Measurement, Materials, & Safety            | 3   | The AAS degree in Tool and Die Making as articulated fulfills the 22 hrs of technical elective course requirements for the BS degree in Industrial Management & Applied Engineering (IMAE). |   |                       |
| MT 102                  | Machining Job Planning, Benchwork,& Layout                     | 3   |   |   |                       |
| MT 105                  | Metal Working Processes III                                    | 3   |   |   |                       |
| MT 210                  | CNC Milling Level I  | 3   |   |   |                       |
| MT 220                  | Metallurgy – Ferrous   | 2   |   |   |                       |
| TECH 109                | Technical Mathematics I  | 4   |   |   |                       |
| TOOL 101                | Tool and Die Processes   | 2   |   |   |                       |
| TOOL 102                | Tool and Die Maintenance                                       | 2   |   |   |                       |
| WELD 115                | Basic Arc Welding/Oxyfuel Welding                              | 3   |   |   |                       |
| Electives               | Choose at least 3 hours from: CADMD 245, 248, 249; MT 211, 214 | 3   |   |   |                       |
|                         |  | 43  |   |   |                       |
|                         |  |     | IMAE 110  | Geometric Dimensioning & Tolerancing  | 3                     |
|                         |  |     | IMAE 208  | Fundamentals of Manufacturing Processes   | 3                     |
|                         |  |     | IMAE 305  | Industrial Safety   | 3                     |
|                         |  |     | IMAE 307  | Applied Calc for Tech   | 3                     |
|                         |  |     | IMAE 340  | Intro to Supervision  | 3                     |
|                         |  |     | IMAE 375  | Production and Inventory Management   | 3                     |
|                         |  |     | IMAE 390  | Cost Estimating   | 3                     |
|                         |  |     |   |   |                       |
|                         |  |     | IMAE 392  | Facilities Planning & Workplace Design  | 3                     |
|                         |  |     |   | Facilities Planning & Workplace Design Fundamentals of Leadership   | 3                     |
|                         |  |     | IMAE 442  | Fundamentals of Leadership  |                       |
|                         |  |     | IMAE 442<br>IMAE 445  | Fundamentals of Leadership<br>Computer Integrated Manufacturing   | 3 3                   |
|                         |  |     | IMAE 442<br>IMAE 445<br>IMAE 450  | Fundamentals of Leadership<br>Computer Integrated Manufacturing<br>Project Management   | 3<br>3<br>3           |
|                         |  |     | IMAE 442<br>IMAE 445<br>IMAE 450<br>IMAE 465  | Fundamentals of Leadership<br>Computer Integrated Manufacturing<br>Project Management<br>Lean Manufacturing                                       | 3<br>3<br>3<br>3      |
|                         |  |     | IMAE 442<br>IMAE 445<br>IMAE 450<br>IMAE 465<br>IMAE 470A   | Fundamentals of Leadership Computer Integrated Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I                         | 3<br>3<br>3<br>3      |
|                         |  |     | IMAE 442<br>IMAE 445<br>IMAE 450<br>IMAE 465<br>IMAE 470A<br>IMAE 470B  | Fundamentals of Leadership Computer Integrated Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I Six Sigma Green Belt II | 3<br>3<br>3<br>3<br>3 |
|                         |  |     | IMAE 442<br>IMAE 445<br>IMAE 450<br>IMAE 465<br>IMAE 470A   | Fundamentals of Leadership Computer Integrated Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I                         | 3<br>3<br>3<br>3      |