

# Curriculum Sheet for Bachelor of Science in Industrial Technology

## Industrial Automation Concentration



| TOTAL HOURS                                    | 35    |  | GENERAL EDUCATION  | HOURS | PREREQUISITE  | SEMESTER      |
|--|-------|--|--|-------|---|---------------|
| English:<br>6 hrs.                             | EN    | 1103   | English Composition I (EN 1104 may substitute)                   | 3     |   | Fall & Spring |
|  | EN    | 1113   | English Composition II (EN 1173 may substitute)                  | 3     |   | Fall & Spring |
| FA: 3 hrs.                                     | XX    | XXXX   | Any Approved Fine Arts Elective (See List)                       | 3     |   | Fall & Spring |
| Math:<br>9 hrs.                                | MA    | 1313   | College Algebra (or higher)                                      | 3     |   | Fall & Spring |
|  | MA    | 1613   | Calculus for Business and Life Sciences (or higher)              | 3     | MA 1313   | Fall & Spring |
|  | MA    | 2113   | Introduction to Statistics (May substitute ST/BQA 2113)          | 3     | MA 1313   | Fall & Spring |
| Natural Science:<br>8 hrs.                     | CH    | 1043   | Survey of Chemistry I (or higher)                                | 3     |   | Fall & Spring |
|  | CH    | 1051   | Experimental Chem (Lab for CH 1043) (or higher)                  | 1     |   | Fall & Spring |
|  | PH    | 1013   | Physical Sci Survey 1 (or higher)                                | 3     | MA 1313   | Fall & Spring |
|  | PH    | 1011   | Physical Science Lab 1 (Lab for PH 1013) (or higher)             | 1     | MA 1313   | Fall & Spring |
| Extra Sci 3 hrs.                               | XX    | XXXX   | Choose From: CH 1213, 1223, PH 1023, 1113, 2213, 2223            | 3     |   | Fall & Spring |
| Humanities:<br>6 hrs.                          | XX    | XXXX   | Any Two Approved Humanities Elective (See List)                  | 3     |   | Fall & Spring |
| Soc. Sci:<br>6 hrs.                            | XX    | XXXX   | Any Two Approved Social Science / Behavioral Elective (See List) | 3     |   | Fall & Spring |
| TOTAL HOURS                                    | 43    |  | MAJOR CORE COURSES   | HOURS | PREREQUISITE  | SEMESTER      |
| Introductory Skills:<br>18 hrs.                | INDT  | 1003   | Technical Drafting and Print Reading                             | 3     |   | Fall & Spring |
|  | INDT  | 1813   | Basic Industrial Electricity and Electronics                     | 3     | MA 1313   | Fall & Spring |
|  | INDT  | 2113   | Introduction to PLC Programming                                  | 3     |   | Fall & Spring |
|  | INDT  | 2123   | Introduction to CNC Programming                                  | 3     | INDT 1003 & MA 1313   | Fall & Spring |
|  | INDT  | 3223   | Industrial Materials   | 3     | CH 1043 OR HIGHER   | Spring        |
|  | INDT  | 3813   | Technical Writing and Presentation for Industry                  | 3     |   | Fall          |
| Management Skills:<br>9 hrs.                   | INDT  | 3063   | Industrial Human Relations                                       | 3     |   | Spring        |
|  | INDT  | 3373   | Forecast and Cost Modeling                                       | 3     | JUNIOR STANDING   | Spring        |
|  | ACC   | 2013   | Principles of Financial Accounting                               | 3     | For final management course, choose one course from any of these options. | Fall & Spring |
|  | BL    | 2413   | Legal Environment of Business                                    |       |   |               |
|  | MGT   | 3823   | Responsible Leadership   |       |   |               |
| MGT  | 3000+ | Any MGT 3000+ Level course w/approval from advisor |  |       |   |               |
| General Knowledge:<br>13 hrs.                  | INDT  | 3043   | Industrial Safety  | 3     |   | Fall & Spring |
|  | INDT  | 3243   | Industrial Metrology   | 3     | JUNIOR STANDING   | Spring        |
|  | INDT  | 3363   | Motion and Time Study  | 3     | JUNIOR STANDING   | Spring        |
|  | INDT  | 4224   | Quality Assurance  | 4     | INDT 3373   | Fall          |
| Seminars:<br>3 hrs.                            | INDT  | 1001   | Introduction to Industrial Technology                            | 1     |   | Fall & Spring |
|  | INDT  | 3101   | Junior Seminar   | 1     | JUNIOR STANDING   | Fall          |
|  | INDT  | 4801   | Senior Seminar   | 1     | INDT 3101 & SENIOR  | Fall & Spring |
| TOTAL HOURS                                    | 39    |  | IAUT CONCENTRATION CORE COURSES                                  | HOURS | PREREQUISITE  | SEMESTER      |
| Required Conc Core:<br>24 hrs                  | INDT  | 2353   | Industrial Computer Aided Drafting and Design                    | 3     | INDT 1003   | Fall          |
|  | INDT  | 2613   | Industrial Fluid Power   | 3     |   | Fall & Spring |
|  | INDT  | 3103   | Advanced Electricity and Electronics                             | 3     | INDT 1813   | Fall & Spring |
|  | INDT  | 4103   | Industrial Control Systems                                       | 3     | INDT 3103   | Fall          |
|  | INDT  | 4203   | Automated Systems I  | 3     | INDT 2113 & INDT 2613   | Fall          |
|  | INDT  | 4233   | Maintenance Management   | 3     | JUNIOR STANDING   | Fall          |
|  | INDT  | 4303   | Industrial Robotics  | 3     | INDT 4103   | Spring        |
|  | INDT  | 4403   | Automated Systems II   | 3     | INDT 4203   | Spring        |
| Conc Electives:<br>Choose 9 hrs from this list | INDT  | 2323   | Welding Technology   | 9     |   | Spring        |
|  | INDT  | 2343   | Parametric Modeling for 3D Design                                |       | INDT 1003   | Spring        |
|  | INDT  | 3133   | Process Equipment and Instrumentation                            |       | INDT 1133   | Fall          |
|  | INDT  | 3683   | CNC Machining Processes  |       | INDT 3243 & INDT 2343   | Spring        |
|  | INDT  | 4213   | Survey of Energy Source and Power                                |       | CH 1023 OR HIGHER   | Fall          |
|  | INDT  | 4263   | Manufacturing Technology and Processes I                         |       | JUNIOR STANDING   | Spring        |
|  | INDT  | 4463   | Manufacturing Technology and Processes II                        |       | INDT 4263   | Fall          |
| Additional Electives:<br>Choose 6 hrs          | INDT  | XXXX   | Choose any two 3000+ Level INDT course                           | 6     |   | Fall & Spring |



# INDUSTRIAL TECHNOLOGY

## INDUSTRIAL AUTOMATION

### Sample Degree Flow Chart



**FALL                      SPRING                      FALL                      SPRING                      FALL                      SPRING                      FALL                      SPRING**

