



# Industrial Technology

## Associate in Applied Science (AAS) Degree or Diploma

### 2010-2012 Graduation Worksheet

Rev 4.28.10

#### PROGRAM DESCRIPTION

The Industrial Technology program prepares students to apply technical knowledge and skills to troubleshoot and repair industrial apparatus ranging from basic mechanical equipment and electrical motor controls to other more complex systems utilized in manufacturing and production environments. The AAS consists of 60 semester credits. The Diploma consists of 45 semester credits. Both programs take approximately 18 months (4 semesters) to complete.

#### WHAT ELSE SHOULD YOU CONSIDER ABOUT THIS PROGRAM AS A CAREER CHOICE?

- High demand for industrial technicians throughout the region and nation
- Preparation for transfer to a university to pursue a bachelor (4-year) degree
- Great variety of work in many types of business and industry
- Anticipated average starting salary \$25,000 - \$35,000 plus extensive benefits

#### RECOMMENDED HIGH SCHOOL COURSES

Blueprint Reading, Drafting/CAD, Electricity/Electronics, Introduction to Computers, Metalworking, Welding

#### INFORMATION

For additional program information, contact enrollment management @ 218.285.7722

#### INDUSTRIAL TECHNOLOGY CORE. DIPLOMA 45 CREDITS and AAS DEGREE 60 CREDITS

##### INDUSTRIAL TECHNOLOGY CORE (Diploma and Degree):

FALL: INDT 1100 (2) Orientation to Industry  
INDT 1200 (3) Industrial Safety  
INDT 1300 (4) Introduction to Shop Practices  
INDT 1400 (3) Introduction to Industrial Mtce.

SPRING: ELEC 1105 (4) Electrical Systems in Industry  
INDT 1500 (2) Pneumatic and Hydraulic Sys. I  
INDT 1605 (3) Introduction to Rigging, Crane Operations, and Rolling Stock  
MATH 1002 (2) Technical Math with Applications

FALL: INDT 2105 (2) Material Transfer/Conveyance Sys.  
INDT 2205 (2) Basic Blueprint Reading and Measurement Practices  
INDT 2300 (3) Pump Maintenance  
WELD 2100 (3) Welding and Cutting Fundamentals

SPRING: CSCI 1100 (3) Introduction to Computers  
INDT 2400 (2) Lubrication and Bearings  
INDT 2500 (2) \*Pneumatic and Hydraulic Sys. II  
INDT 2600 (2) Drive Component/Troubleshooting  
WELD 2200 (3) \*Structural Welding Fundamentals

**GENERAL EDUCATION REQUIREMENTS (Degree).** Choose a minimum of 15 credits from at least three goal areas of the Minnesota Transfer Curriculum, including the following:

ENGL 1010 (3) English Composition I (MnTC 1)  
ENGL 1020 (3) \*English Composition II (MnTC 1)

#### OPTIONAL ELECTIVE:

PAPR 1100 (3) Introduction to Pulp and Paper Technology (recommended for those interested in working in the paper industry)

**To be eligible for graduation with the Industrial Technology Diploma or AAS Degree, you must satisfy the following requirements:**

- ⇒ 45 Credit Diploma: Must complete all required courses with a minimum GPA of 2.0.
- ⇒ 60 Credit AAS Degree: Must complete all required courses with a minimum GPA of 2.0, and the additional General Education Requirements, with a minimum GPA of 2.0.

***BEGIN YOUR FUTURE!***

**NOTES:**

- All students are required to have steel-toed boots by the first day of class.
- \* denotes a course with a prerequisite.
- The information in this graduation worksheet is for use as an academic planning tool and is subject to change.
- Rainy River Community College is a member of the Minnesota State Colleges and Universities System.
- Rainy River Community College is an equal opportunity employer and educator.

**LEARNING OUTCOMES**

- Troubleshoot and repair industrial mechanical equipment safely
- Develop and utilize predictive and preventative maintenance programs
- Perform facilities and equipment maintenance and upgrading
- Maintain and repair mechanical equipment: pumps, conveyors, rolling stock
- Weld using the most needed equipment in many applications
- Work with and without supervision, both alone and in teams
- Know electrical codes, electrical equipment, and use equipment safely
- Diagnose problems and select corrective action