## Curriculum Outline for a Bachelor's Degree in: Engineering Graphics & Design

### Oral & Written Communication
- **Course & Title**: University Studies, 45 Hours
- **Hrs**: 3
- **Course**: COM 161 Intro. to Public Speaking

### World's Historical, Literary, & Philosophical Traditions
- **Course & Title**: University Studies, 45 Hours
- **Hrs**: 3
- **Course**: HUM 211 Western Humanities Tradition
- **Prerequisite**: ENG 105 or 150

### Scientific Inquiry, Methodologies, & Quantitative Skills
- **Course & Title**: University Studies, 45 Hours
- **Hrs**: 4
- **Course**: CHE 105 Introductory Chemistry I
- **Prerequisite**: Math ACT Score of at least 20 or MAT 097 strongly advised
- **Course**: MAT 135 Intro. to Probability & Statistics
- **Prerequisite**: Math ACT score of at least 20 or MAT 097
- **Course**: PHY 130 General Physics I and PHY 131 General Physics Lab
- **Prerequisites**: MAT 130, 140 or equivalent; PHY 130 and 131 must be taken together

### Global Awareness, Cultural Diversity, and the World's Artistic Traditions
- **Course & Title**: University Studies, 38 Hours
- **Hrs**: 3
- **Course**: Any course in category

### Social & Self-Awareness and Responsible Citizenship
- **Course & Title**: University Studies, 38 Hours
- **Hrs**: 3
- **Course**: Any course in sub-category of ethics, social responsibility, & civic engagement
- **Course**: ECO 231 Principles of Microeconomics
- **Prerequisites**: MAT 117, 120, 140 or 150; or an Math ACT score of at least 23; or consent of instructor

### University Studies Electives
- **Course & Title**: University Studies, 45 Hours
- **Hrs**: 5
- **Course**: MAT 230 Technical Math II
- **Prerequisite**: MAT 130 or a Math ACT score of at least 24
- **Course**: CSC 199 Intro. to Information Technology
- **Prerequisite**: MAT 105 or Math ACT of at least 20

### Engineering Graphics & Design Required Courses, 37 Hours
- **Course & Title**: University Studies, 38 Hours
- **Hrs**: 3
- **Course**: ENG 324 Technical Writing for IND. TECH.
- **Prerequisite**: ENG 105
- **Course**: IET 399 Professional Development Seminar I
  - **Prerequisite**: Sophomore or Junior Standing
- **Course**: IET 488 Cooperative Education/Internship
- **Prerequisite**: Junior Standing
- **Course**: ITD 202 Applied Technical Drawing (F)
- **Prerequisite**: ITD 101 or ITD 104 (Spring Semester – Ottway Only)
- **Course**: ITD 301 Architectural Design I
  - **Prerequisite**: ITD 101 (or 107)
- **Course**: ITD 304 Advanced Parametric Modeling (S)
  - **Prerequisite**: ITD 204
- **Course**: ITD 306 Engineering Graphics (S)
  - **Prerequisites**: ITD 101 or 107, 104 and 202
- **Course**: ITD 333 ANSI Fundamentals for Mechanical Product Design (S)
  - **Prerequisites**: ITD 202, 204 & 330

### Select One Area of Emphasis Below:

#### Industrial / Manufacturing Design Emphasis
- **Course & Title**: University Studies, 38 Hours
- **Hrs**: 3
- **Course**: IET 587 Quality Control (S)
  - **Prerequisite**: MAT 135 or CIS 243
- **Course**: ITD 403 Production & Tooling Design & Modeling (F)
  - **Prerequisite**: ITD 304, 330 and 333
- **Course**: ITD 498 Industrial Design Processes and Prototypes (S)
  - **Prerequisites**: ITD 130, 304, 333, & 403

#### Architectural / Construction Design Emphasis
- **Course & Title**: University Studies, 38 Hours
- **Hrs**: 3
- **Course**: CET 310 Anatomy of Buildings (S)
- **Course**: ITD 401 Architectural Design II (F)
  - **Prerequisites**: ITD 301 and ITD 350
- **Course**: ITD 503 Architectural Design III (S)
  - **Prerequisite**: 401

### Total Curriculum Requirements, 120 Hours

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Last Updated: April 2013