## *2011-2013 CATALOG*
## *CURRICULUM OUTLINE FOR A BACHELOR'S DEGREE IN:*
# ENGINEERING GRAPHICS & DESIGN

| SEM | GRADE | COURSE & TITLE - UNIVERSITY STUDIES, 45 HOURS | HRS |
|---|---|---|---|
| | | ***ORAL & WRITTEN COMMUNICATION*** | |
| | | COM 161 INTRO. TO PUBLIC SPEAKING | 3 |
| | | ENG 105 CRITICAL READING, WRITING, AND INQUIRY | 4 |
| | | ***WORLD'S HISTORICAL, LITERARY, & PHILOSOPHICAL TRADITIONS*** | |
| | | HUM 211 WESTERN HUMANITIES TRADITION | 3 |
| | | CIV 201 WORLD CIVILIZATION & CULTURES I **OR** CIV 202 WORLD CIVILIZATIONS & CULTURES II | 3 |
| | | ***SCIENTIFIC INQUIRY, METHODOLOGIES, & QUANTITATIVE SKILLS*** | |
| | | CHE 105 INTRODUCTORY CHEMISTRY I | 4 |
| | | MAT 135 INTRO. TO PROBABILITY & STATISTICS Prereq: Math ACT score of at least 20 or MAT 105 | 4 |
| | | PHY 130 GENERAL PHYSICS I **AND** PHY 131 GENERAL PHYSICS LAB<br>Prereq: MAT 140 or equivalent; 130 and 131 must be taken together | 4 |
| | | ***GLOBAL AWARENESS, CULTURAL DIVERSITY, AND THE WORLD'S ARTISTIC TRADITIONS*** | |
| | | ANY COURSE IN CATEGORY | 3 |
| | | ***SOCIAL & SELF-AWARENESS AND RESPONSIBLE CITIZENSHIP*** | |
| | | ANY COURSE IN SUB-CATEGORY OF ETHICS, SOCIAL RESPONSIBILITY, & CIVIC ENGAGEMENT | 3 |
| | | ECO 231 PRINCIPLES OF MICROECONOMICS<br>Prereqs: MAT 117, 120, 140 or 150; or an Math ACT score of at least 23; or consent of instructor | 3 |
| | | ***UNIVERSITY STUDIES ELECTIVES*** | |
| | | MAT 230 TECHNICAL MATH II Prereq: MAT 130 or a Math ACT score of at least 24 | 5 |
| | | CSC 199 INTRO. TO INFORMATION TECHNOLOGY Prereq: MAT 105 or Math ACT of at least 20 | 3 |
| | | UNIVERSITY STUDIES ELECTIVES | 3 |

| SEM | GRADE | COURSE & TITLE - CORE CLASSES, 38 HOURS | HRS |
|---|---|---|---|
| | | ENG 324 TECHNICAL WRITING FOR IND. TECH. Prereq: ENG 105 | 3 |
| | | IET 399 PROFESSIONAL DEVELOPMENT SEMINAR I | 1 |
| | | IET 488 COPERATIVE EDUCATION / INTERNSHIP | 3 |
| | | ITD 099 FRESHMAN ORIENTATION (F) | 1 |
| | | ITD 101 INTRO. TO DESIGN & GRAPHIC COMMUNICATIONS | 4 |
| | | ITD 104 COMPUTER AIDED DESIGN Prereq: ITD 101 or ITD 107 | 4 |
| | | ITD 130 MANUFACTURING PROCESSES & MATERIALS | 3 |
| | | ITD 204 PARAMETRIC MODELING & RENDERING Prereq: ITD 104 (TAKE IN THE FALL SEMESTER) | 3 |
| | | ITD 301 ARCH. DRAWING & RESIDENTIAL PLANNING Prereq: ITD 101 and 104 or ITD 107 | 4 |
| | | ITD 350 CONSTRUCTION SYSTEMS Prereq: ITD 101 or 107 and ITD 130 | 4 |
| | | MAT 130 TECHNICAL MATH I Prereq: Math ACT score of at least 21 or MAT 105 | 5 |
| | | MGT 350 FUNDAMENTALS OF MANAGEMENT Prereq: Junior Standing | 3 |
| | | **ENGINEERING GRAPHICS & DESIGN REQUIRED COURSES, 37 HOURS** | |
| | | CET 298 STRENGTH OF MATERIALS Prereqs: ENT 287 and MAT 230 | 3 |
| | | ENT 287 STATICS FOR TECHNOLOGY Prereqs: MAT 130 and PHY 130/131 | 3 |
| | | ITD 202 APPLIED TECHNICAL DRAWING Prereqs: ITD 101 and 104 | 4 |
| | | ITD 330 MACHINE TOOL PROCESSES Prereq: ITD 130 | 4 |
| | | ITD 304 ADVANCED PARAMETRIC MODELING (S) Prereq: ITD 204 | 4 |
| | | ITD 306 ENGINEERING GRAPHICS (S) Prereqs: ITD 101, 104 and 202 | 4 |
| | | ITD 333 ANSI FUNDAMENTALS FOR MECHANICAL PRODUCT DESIGN (S) Prereqs: ITD 202, 204 & 330 | 4 |
| | | TECHNICAL ELECTIVE, 4 HOURS (at least 1 hour must be 300/400 level) | 4 |

| **SELECT ONE AREA OF EMPHASIS BELOW:** | | | |
|---|---|---|---|
| | | **INDUSTRIAL / MANUFACTURING DESIGN EMPHASIS** | |
| | | IET 587 QUALITY CONTROL (S) Prereq: MAT 135 or CIS 243 | 3 |
| | | ITD 403 PRODUCTION & TOOLING DESIGN & MODELING (F) Prereq: ITD 304, 330 and 333 | 4 |
| | | **ARCHITECTURAL / CONSTRUCTION DESIGN EMPHASIS** | |
| | | CET 310 ANATOMY OF BUILDINGS (S) | 3 |
| | | ITD 401 ARCH. DRAFTING & DESIGN - MULTI-FAMILY LIGHT COMMERCIAL (F)<br>Prereqs: ITD 101, 104, 301, & 350 | 4 |

**TOTAL CURRICULUM REQUIREMENTS, 120 HOURS** Dated: August 2011