

NC A&T Industrial and Systems Engineering

(Unofficial Community Colleges to NC A&T Curriculum)

Degree Earned: NC A&T Bachelor of Science in Industrial and Systems Engineering

Transfer GPA = 2.5

Effective: 2016-2017

Grey Highlighted Courses – Take at NC A&T

FRESHMAN YEAR

| Com College | Fall Semester | Credit | Com College | Spring Semester | Credit |
|-------------|--|--------|-------------|---|-----------|
| ENG 111 | ENGL 100 Ideas & Their Expressions I | 3 | ENG 112 | ENGL 101 Ideas and Expressions II | 3 |
| CHM 151 | CHEM 106 General Chemistry VI | 3 | | Humanities/Fine Arts Elective | 3 |
| CHM 151 | CHEM 116 General Chemistry VI Lab | 1 | NC A&T | ISEN 162 Computer Programming in VB for Engr. | 2 |
| MAT 271 | MATH 131 Calculus I | 4 | MAT 272 | MATH 132 Calculus II | 4 |
| EGR 150 | GEEN 100 Engineering Design and Ethics | 2 | PHY 251 | PHYS 241 General Physics I | 3 |
| NC A&T | GEEN 111 College of Engineering Colloquium | 1 | PHY 251 | PHYS 251 General Physics I Lab | 1 |
| | | | NC A&T | ISEN 121 ISE Colloquium | 1 |
| 14 | | | | | 17 |

SOPHOMORE YEAR

| Com College | Fall Semester | Credit | Com College | Spring Semester | Credit |
|-------------|--|--------|-------------|---|-----------|
| PSY 150 | PSYC 320 General Psychology | 3 | | Humanities Elective | 3 |
| NC A&T | ISEN 102 Graphic Visualization for IE | 2 | | Gen ED | 3 |
| NC A&T | ISEN 246 Industrial Production Proc | 3 | NC A&T | MEEN 260 Materials Science | 2 |
| MAT 285 | MATH 431 Intro to Differential Equations | 3 | NC A&T | ISEN 255 Methods Engineering | 3 |
| PHY 252 | PHYS 242 General Physics II | 3 | NC A&T | ISEN 286 Engineering Teams and Leadership | 1 |
| PHY 252 | PHYS 252 General Physics II Lab | 1 | MAT 273 | MATH 231 Calculus III | 4 |
| 15 | | | | | 16 |

JUNIOR YEAR

| Com College | Fall Semester | Credit | Com College | Spring Semester | Credit |
|-------------|---|--------|-------------|---|-----------|
| NC A&T | ISEN 380 Info Tech for ISE | 3 | NC A&T | ISEN 324 Computer Aided Design and Mfg. | 3 |
| NC A&T | ISEN 430 Deterministic Operations Research | 3 | NC A&T | ISEN 386 Systems Approaches for IE | 1 |
| NC A&T | ISEN 361 Engineering Econ and Cost Analysis | 3 | NC A&T | ISEN 435 Stochastic Operations Research | 3 |
| NC A&T | ISEN 370 Engineering Statistics | 3 | NC A&T | ISEN 465 Facilities Design | 3 |
| NC A&T | ISEN 471 Ergonomics | 2 | NC A&T | ISEN 472 Cognitive Human Factors | 2 |
| | | | EGR 220 | MEEN Statics/Mech of Materials | 3 |
| 14 | | | | | 15 |

SENIOR YEAR

| Com College | Fall Semester | Credit | Com College | Spring Semester | Credit |
|-------------|--|--------|-------------|--|-----------|
| NC A&T | ISEN 425 Quality Assurance | 3 | NC A&T | ISEN 440 Decision Support Systems for ISE | 3 |
| NC A&T | ISEN 455 Production Control | 3 | NC A&T | ISEN 480 Systems Engineering | 3 |
| NC A&T | ISEN 415 Discrete Event Simulation Mod & Simulations | 3 | NC A&T | ISEN 486 Professionalism and Ethics for IE | 1 |
| NC A&T | ISEN 475 Design of Experiments | 3 | NC A&T | ISEN 495 Design Projects in Industrial Engineering | 3 |
| NC A&T | ISEN 400 General Engineering Topics Review | 1 | NC A&T | ISE Technical Elective | 3 |
| NC A&T | ISE Technical Electives | 3 | | | |
| 16 | | | | | 13 |

NC A&T - Minimum Credit Hours Required for Graduation in Industrial and Systems Engineering

120