

| NGEE ANN POLYTECHNIC - DIPLOMA IN MECHANICAL ENGINEERING  | WICHITA STATE UNIVERSITY   |
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| Advanced Machine Shop Practice  | Free elective  |
| Advanced Manufacturing Technology Theory and Practice<br><br><b>AND</b><br><br>Basic Manufacturing Theory and Practice A<br><br><b>AND</b><br><br>Basic Manufacturing Theory and Practice B | MFGE 258: Manufacturing Methods and Materials I  |
| Air-Conditioning and Cleanroom Technology   | Free elective  |
| Air-Conditioning and Refrigeration  | Free elective  |
| Applied Mechanics - Statics<br><br><b>AND</b><br><br>Basic Thermofluid  | PHYS 313Q: University Physics I<br><br><b>AND</b><br><br>PHYS 315Q: University Physics Lab I |
| Applied Mechanics - Dynamics  | Free elective  |
| Applied Mechanics 2   | A E 223: Statics   |
| Applied Mechanics I<br><br><b>AND</b><br><br>Basic Thermodynamics<br><br><b>AND</b><br><br>Fluid Mechanics  | PHYS 313Q: University Physics I  |
| Applied Thermodynamics  | M E 398: Thermodynamics I  |

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| Automation and Robotics Technology                               | Free elective                             |
| Communication Skills P1<br><b>AND</b><br>Communication Skills P2 | COMM 111: Public Speaking                 |
| Computer Aided Design  | I EN 222: Engineering Graphics            |
| Computer Aided Manufacturing                                     | Free elective                             |
| Computer Control of Automated Systems                            | Free elective                             |
| Computer Programming   | C S 210: Introduction to Computer Science |
| Creative and Applied Thinking Skills                             | Free elective                             |
| Creative Design  | Free elective                             |
| Creativity and Innovation  | Free elective                             |
| Electrical Technology  | Free elective                             |
| Electronics and Automation Technology                            | Free elective                             |
| Electronics and Drives   | Free elective                             |
| Electrotechnology I  | Free elective                             |
| E-Manufacturing  | Free elective                             |
| Energy System Management   | Free elective                             |
| Engineering Design   | M E 339: Design of Machinery              |
| Engineering Drawing and CAD                                      | Free elective                             |
| Engineering Drawing and Design                                   | Free elective                             |
| Engineering Materials 1  | Free elective                             |
| Engineering Materials 2  | M E 250: Materials Engineering            |
| Engineering Mathematics 1  | College Algebra                           |

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| Engineering Mathematics 2  | MATH 242Q: Calculus I                            |
| Engineering Mathematics 3  | MATH 555: Differential Equations I               |
| Engineering Mathematics 4  | MATH 243: Calculus II                            |
| Engineering Maths 1 A and Computer Programming 1 A                                 | MATH 112: Precalculus Mathematics                |
| Engineering Maths 1 B and Computer Programming 1 B                                 | MATH 242Q: Calculus I                            |
| Engineering System Design  | Free elective                                    |
| English and Technical Writing 1  | No credit  |
| English and Technical Writing 2  | No credit  |
| EPP Project 1  | Free elective                                    |
| Individual and Community   | Free elective                                    |
| Industrial Attachment Programme  | Free elective                                    |
| Industrial Automation 1<br>AND<br>Industrial Automation 2                          | Mechanical Engineering elective                  |
| Industrial Management  | MGMT 360: Management and Organizational Behavior |
| Information Technology Applications  | ACCT 260: Information Processing Systems         |
| Instrumentation and Control  | Free elective                                    |
| Instrumentation and Control  | Free elective                                    |
| Manufacturing Planning and Control   | Free elective                                    |
| Manufacturing Technology and Materials<br>AND<br>Workshop Technology and Materials | MFGE 258: Manufacturing Methods and Materials I  |

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| Materials and Manufacturing Technology A | Free elective                        |
| Materials and Manufacturing Technology B | Free elective                        |
| Mechanics of Machines and Materials      | A E 333: Mechanics of Materials      |
| Micro Electro Mechanics Systems (MEMS)   | Free elective                        |
| Operations Planning and Control          | Free elective                        |
| Oral Communication                       | COMM 111: Public Speaking            |
| Oral Presentation and Job-Hunting Skills | No credit                            |
| Photonics                                | Free elective                        |
| Physical Education                       | Free elective                        |
| Precision Engineering                    | Free elective                        |
| Product Design and Tooling Engineering   | Free elective                        |
| Productivity and Quality Studies         | Free elective                        |
| Productivity Quality and Social Values   | Business elective                    |
| Programming for Engineering Application  | C S 212: Pascal Programming Language |
| Project 1                                | Free elective                        |
| Project 2                                | Free elective                        |
| Project Management                       | Free elective                        |
| Project Report Writing                   | Free elective                        |
| Robotic Technology                       | I EN 670: Industrial Robotics        |
| Social and Community Values 1            | Free elective                        |
| Social and Community Values 2            | Free elective                        |
| Sports and Wellness                      | Free elective                        |

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| Strength of Materials                          | Free elective                                    |
| Supervisory Management                         | MGMT 360: Management and Organizational Behavior |
| Thermodynamics                                 | M E 398: Thermodynamics I                        |
| Understanding Writing for Academic Application | No credit  |
| Vacation Training Programme                    | Free elective                                    |

*Last Updated: July 20, 2004*