| Communication Required Courses   |
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| COMM 111 Public Speaking   |
|  |
| ENGL 101 College English I   |
| ENGL 102 College English II  |
| Mathematics  |
| MATH 242 Calculus I  |
| MATH 245 Calculus II   |
| MATH 544 Calculus III<br>MATH 555 Differential Equations I                 |
| Seimes   |
| Science  |
| CHEM 211 General Chemistry I   |
| PH 15 515 University Physics I<br>DHVS 214 University Dhysics II           |
| PH 15 514 University Physics I<br>DHVS 315 University Physics Laboratory I |
| Natural Science Elective   |
| Finding Core   |
| AE 222 Statics   |
| AE 225 Statics   |
| LE 202 Clicuits I<br>IME 258 Manufacturing Methods and Meterials I         |
| ME 208 Thermodynamics I  |
| Tachnical  |
| AE 222 Machanias of Materials  |
| ME 225 Dynamics for Machanical Engineers                                   |
| IME 335 Dynamics for Mechanical Engineers                                  |
| ME 222 & L'Engliècering Oraphics   |
| ME 250 Materials Engineering Laboratory                                    |
| ME 225 Numerical Methods   |
| ME 329 Design of Machinery   |
| ME 439 Mechanical Engineering Design I                                     |
| ME 502 Thermodynamics II   |
| ME 502 Fluid Mechanics   |
| ME 522 Heat Transfer   |
| ME 533 Mechanical Engineering Laboratory                                   |
| ME 633 Mechanical Engineering Systems Laboratory                           |
| ME 659 Mechanical Control Systems  |
| ME 662 Senior Capstone Design  |
| General Education  |
| Fine Arts  |
| Humanities   |
| Behavioral and Social Sciences   |
| Further Studies  |
| ME Design Electives (One Course)   |
| ME 541 Mechanical Engineering Design II                                    |
| ME 637 Computer-Aided Engineering  |
| ME 729 Computer-Aided Analysis of Mechanical Systems                       |
| ME 749 Applications of Finite Element Methods in Mechanical Engineering    |
| Thermal Design Electives (One Course)                                      |
| ME 544 Design of HVAC Systems  |
| ME 731 Advanced Design of Heat Exchanger                                   |
| ME 745 Deign of Thermal Systems  |

| Mechanical Electives (Two Courses)                        |
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| ME 469 Energy Conversion                                  |
| ME 581 Introduction of Corrosion                          |
| ME 602 Engineering for the Environment                    |
| ME 650V Conduction of Heat Transfer                       |
| ME 650W Introduction to Micro-Electro-Mech Systems        |
| ME 651 Biomaterials                                       |
| ME 660 Polymer Material and Engineering                   |
| ME 665 Selection of Materials for Design/ Manufacturing   |
| ME 667 Mechanical Properties of Materials                 |
| ME 670 Intro to Nano Technology                           |
| ME 672 & L Manufacturing of Composites                    |
| ME 673 Recovering of Engineering Materials                |
| ME 680 & L Laser Materials Process and Design             |
| ME 702 Energy and Sustainability                          |
| ME 709 Injury Biomechanics                                |
| ME 710 Six Sigma for Mechanical Engineers                 |
| ME 719 Basic Combustion Theory                            |
| ME 725 Mechanical Vibrations and Acoustics                |
| ME 728 Advanced Electronic Materials                      |
| ME 737 Robotics and Control                               |
| ME 739 Advanced Machine Design                            |
| ME 747 Microcomputer Based Mechanical Systems             |
| ME 750AE Computer Modeling for Fluid Flow & Heat Transfer |
| ME750AF Autonomous Vehicles                               |
| ME 750 AG Indoor Air Pollution & Simulation               |
| ME 750 AI Phase Transformation in Materials               |
| ME 752 Failure Analysis Methods and Tools                 |
| ME 753 Advanced Materials for Energy Systems              |
| ME 758 Non-Linear Control Electro-Mech Systems            |
| ME 760 Fracture Mechanics                                 |
| ME 762 Polymeric Composite Materials                      |
| ME 775 Introduction to Micro-electro Mech Systems         |
| ME 782 Engineering Applications of CFD and Heat Transfer  |