

Materials for Manufacturing Certificate Matrix

Program Goals	1. The graduates of the program will have understanding of the fundamental principles of Materials Engineering and related areas.	2. The graduates of the program will learn advanced and emerging areas of Application of Materials Engineering Principles in Manufacturing and related areas.	3. The program will assist in professional advancement of participating students
ME 580 Advanced Engineering Materials	x		x
ME 582 Injection Molding	x	x	x
ME 583 Mechanical Behavior of Materials OR ME 584 Mechanical Behavior of Polymers	x		x
ME 585 Cast Metals in Engineering Design	x	x	x
ME 586 Materials Consideration in Manufacturing	x	x	x
ME 587 Automotive Composites	x		x
ME 589 Composite Materials	x		x
ME 591 Degradation of Materials	x		x
ME 593 Powder Materials and Processing	x	x	x
ME 595 Digital Manufacturing	x	x	x
ME611 Modeling of Engineering Materials	x		x
AENG 587 Automotive Manufacturing Processes		x	x
AENG 687 Advanced Automotive Manufacturing Processes		x	x
IMSE 504 Metal Forming Processes	x	x	x
IMSE 533 Manufacturing Systems		x	x
IMSE 537 Metal Machining Processes		x	x
IMSE 538 Intelligent Manufacturing		x	x