

# MASTER OF ENGINEERING IN ADVANCED MANUFACTURING, DIGITAL MANUFACTURING TRACK

## Curriculum

Code	Title	Credit Hours
<b>Core Courses</b>		<b>(12-14)</b>
MMAE 501	Engineering Analysis I	3
Select 9-11 credit hours from the following courses:		9-11
ECE 411	Power Electronics	4
ECE 412	Hybrid Electric Vehicle Drives	4
ECE 438	Control Systems	3
ECE 505	Applied Optimization for Engineers	3
MMAE 546	Advanced Manufacturing Engineering	3
MMAE 547	Computer-Integrated Manufacturing Technologies	3
MMAE 557	Computer-Integrated Manufacturing Systems	3
MMAE 560	Statistical Quality and Process Control	3
<b>Digital Manufacturing Courses</b>		<b>(9)</b>
Select nine credit hours from the following courses:		9
ECE 565	Computer Vision and Image Processing	3
ENGR/MMAE 539	Robotic Motion Planning	3
ENGR/MMAE 587	Introduction to Digital Manufacturing	3
MMAE 445	Computer-Aided Design	3
MMAE 543	Modern Control Systems	3
MMAE 545	Advanced CAD/CAM	3
MMAE 587	Introduction to Digital Manufacturing	3
<b>Elective Courses</b>		<b>(7-9)</b>
Select seven to nine credit hours from the following courses:		7-9
ENGR 595	Product Development for Entrepreneurs	3
MMAE 451	Finite Element Methods in Engineering	3
MMAE 502	Engineering Analysis II	3
MMAE 532	Advanced Finite Element Methods	3
MMAE 541	Advanced Dynamics	3
MMAE 570	Computational Methods in Materials Science and Engineering	3
MMAE 589	Applications in Reliability Engineering I	3
MMAE 590	Applications in Reliability Engineering II	3
MMAE 594	Project for Master of Engineering Students	1-6

**Minimum degree credits required: 30**