



ADVANCED MANUFACTURING CERTIFICATE APPROVAL FORM

Office of the Registrar

INSTRUCTIONS ON BACK

Student RIN#: _____ Email: _____

Day Phone: _____

Print Name: _____
(first) (middle) (last)

Local Address: _____

Visa Type (if not U.S. Citizen, Permanent Resident or Refugee, circle one): F-1 F-2 J-1 B-2

Degree: _____ Curriculum: _____

Request Certificate in: Advanced Manufacturing

Student Signature: _____ Date: _____

Is this your **FIRST REQUEST** or a **REVISION**? (Circle one).

	Course Subject and Number	Course Title	Semester Taken	Grade (must be 'B' or better)
1	ENGR-6960/MANE- 6961	Advanced Manufacturing Processes and Systems		
2	MANE-6800	Manufacturing Systems Integration		
3	ISYE-6600	Design of Manufacturing System Supply Chains		
Additional Course From Master List				
4				

OR Approved Culminating Manufacturing Experience Description and Dates

Academic Approvals

Manufacturing Forum Chair: _____

Date: _____

Associate Dean of Academic Affairs (School of Engineering): _____

Date: _____

Administrative Approvals

International Student Services: _____

Date: _____

To receive a *Manufacturing Certificate* from Rensselaer, graduate students must fulfill the following requirements:

- Complete a M.S., M.Eng., or Ph.D. degree in engineering
- Receive a grade of B or better in three specific courses:
 - ISYE 6600 – Design of Manufacturing System Supply Chains
 - ENGR 6960 - Advanced Manufacturing Processes and Systems
 - MANE 6800 – Manufacturing Systems Integration.
- Take one additional course from the *Manufacturing Course Master List*^a (prior approval not needed) OR complete one culminating manufacturing experience from the list below that is approved by the *Manufacturing Forum*^b both midway and at the end of its completion:
 - Thesis (M.S. or Ph.D.) or project (M.Eng.) related to manufacturing
 - Teaching Assistant for ENGR 4710 or ENGR 4720 course
 - Prior professional experience (one year cumulative) in manufacturing including full-time position, Co-op position, or internship.
- The current Manufacturing Forum Co-Chairs are Prof. Daniel Walczyk (walczd@rpi.edu) and Prof. Johnson Samuel (samuej2@rpi.edu).

^a*Manufacturing Course Master List*

ECSE/CSCI 4480 – Robotics I
ECSE 4490 / CSCI 6490 – Robotics II
ECSE 6240 – VLSI Fabrication Technology
ECSE 6300 – Integrated Circuit Fabrication Laboratory

ENGR 4710 – Manufacturing Processes and Systems I
ENGR 4720 – Manufacturing Processes and Systems II

ISYE 4200 – Design and Analysis of Work Systems
ISYE 4230 – Quality Control
ISYE 4520 – Facilities Design and Industrial Logistics
ISYE 6210 – Theory of Production Scheduling
ISYE 6620 – Discrete-Event Simulation

MANE 4550 – Analysis of Manufacturing Processes
MANE 6962 – Additive Manufacturing
MANE 6961 – Sustainability & Design
MANE 6964 – Micro/Meso-Scale Manufacturing

MGMT 4110 – Operations Management
MGMT 6490 – Competitive Advantage and Operations Strategy
MGMT 6100 – Statistics and Operations Management
MGMT 6810 – Management of Technical Projects

MTLE 4400 – Materials Synthesis and Processing I
MTLE 4450 – Materials Synthesis and Processing II
MTLE 6080 – Introduction to Electron Microscopy