Mech and Aero - Joint (MAAJ)

Mechanical and Aerospace Engineering (Joint) (MAAJ) Courses

MAAJ 5001 [0.5 credit] (MCG 5101) Theory of Elasticity

MAAJ 5002 [0.5 credit] (MCG 5102) Advanced Stress Analysis

MAAJ 5003 [0.5 credit] (MCG5103) Theory Perfectly Plastic Solid

MAAJ 5004 [0.5 credit] (MCG 5104) Theory of Plates and Shells

MAAJ 5005 [0.5 credit] (MCG 5105) Continuum Mechanics

MAAJ 5006 [0.5 credit] (MCG 5106) Advanced Topics in Elasticity

MAAJ 5007 [0.5 credit] (MCG 5107) Adv. Dynamics w/Applications

MAAJ 5008 [0.5 credit] (MCG 5108) Finite Element Analysis

MAAJ 5009 [0.5 credit] (MCG 5109) Topics:Finite Element Analysis

MAAJ 5050 [0.5 credit] Fundamentals of Fluid Dynamics Also listed as MECH 5000.

MAAJ 5059 [0.5 credit]
Environmental Fluid Mechanics
Includes: Experiential Learning Activity
Also listed as MECH 5009.

MAAJ 5100 [0.5 credit] (MCG 5110) Micromechanics of Solids

MAAJ 5101 [0.5 credit] (MCG 5111) Gas Dynamics

MAAJ 5104 [0.5 credit] (MCG 5114) Analy and Des: Pressure Vessels

MAAJ 5105 [0.5 credit] (MCG 5115) Non-Linear Optimization

MAAJ 5107 [0.5 credit] (MCG 5117) Intro to Composite Materials Includes: Experiential Learning Activity

MAAJ 5108 [0.5 credit] (MCG 5118) Introduction to Plasticity

MAAJ 5109 [0.5 credit] (MCG 5119) Fracture Mechanics

MAAJ 5151 [0.5 credit]

Dynamics and Aerodynamics of Flight
Includes: Experiential Learning Activity
Also listed as MECH 5101.

MAAJ 5155 [0.5 credit]
Orbital Mechanics and Space Control
Includes: Experiential Learning Activity
Also listed as MECH 5105.

MAAJ 5206 [0.5 credit] (MCG 5126) Deformation of Materials

MAAJ 5209 [0.5 credit] (MCG 5129) Hot Working of Metals

MAAJ 5254 [0.5 credit] Fundamentals of Combustion Also listed as MECH 5204.

MAAJ 5255 [0.5 credit]
Building Performance Simulation
Includes: Experiential Learning Activity
Also listed as MECH 5205.

MAAJ 5301 [0.5 credit] (MCG 5131) Heat Transfer by Conduction

MAAJ 5302 [0.5 credit] (MCG 5132) Heat Transfer by Convection

MAAJ 5303 [0.5 credit] (MCG 5133) Heat Transfer by Radiation

MAAJ 5304 [0.5 credit] (MCG 5134) Heat Transfer w/Phase Change

MAAJ 5306 [0.5 credit] (MCG 5136) Fluid Mech and Heat Transfer

MAAJ 5307 [0.5 credit] (MCG 5137) Solid Mechanics and Materials

MAAJ 5308 [0.5 credit] (MCG 5138) Topics in Mech Engineering

MAAJ 5352 [0.5 credit] Instrumentation Techniques Also listed as MECH 5302.

MAAJ 5354 [0.5 credit]
Computational Fluid Dynamics of Compressible Flow
Also listed as MECH 5304.

MAAJ 5356 [0.5 credit] (MCG 5306) Theory of Subsonic Flows

MAAJ 5357 [0.5 credit] (MCG 5307) Theory of Supersonic Flows MAAJ 5401 [0.5 credit] (MCG 5141) **Statistical Thermodynamics**

MAAJ 5408 [0.5 credit] (MCG 5551) Theorie d'Ecoulement Visqueux

MAAJ 5409 [0.5 credit] (MCG 5552) Theorie de Turbulence

MAAJ 5451 [0.5 credit] **Turbomachinery**

Includes: Experiential Learning Activity Also listed as MECH 5401.

MAAJ 5452 [0.5 credit] (MCG 5144) **Superalloys and Ceramix-Metal Matrix Composites**

MAAJ 5457 [0.5 credit] **Conductive and Radiative Heat Transfer** Also listed as MECH 5407.

MAAJ 5459 [0.5 credit] (MCG 5349) Two-Phase Flow and Heat Transfer

MAAJ 5500 [0.5 credit] (MCG 5557) Mecanique de Fluides

MAAJ 5501 [0.5 credit] (MCG 5151) **Laminar Flow Theory**

MAAJ 5502 [0.5 credit] (MCG 5152) Theory of Turbulance

MAAJ 5505 [0.5 credit] (MCG 5155) **Inviscid Flow Theory**

MAAJ 5506 [0.5 credit] (MCG 5156) Measurement of Fluid Mech

MAAJ 5507 [0.5 credit] (MCG 5157) Num Comp:Fluid Dyn and Heat Tran

MAAJ 5508 [0.5 credit] (MCG 5158) **Industrial Fluid Mechanics**

MAAJ 5509 [0.5 credit] (MCG 5159) **Production Planning and Control**

MAAJ 5550 [0.5 credit] **Advanced Vibration Analysis** Includes: Experiential Learning Activity Also listed as MECH 5500.

MAAJ 5555 [0.5 credit] Stability Theory & Application Also listed as MECH 5505.

MAAJ 5557 [0.5 credit] **Advanced Kinematics** Includes: Experiential Learning Activity Also listed as MECH 5507.

MAAJ 5601 [0.5 credit] (MCG 5161) **Environmental Engineering**

MAAJ 5608 [0.5 credit] (MCG 5168) **Industrial Organization**

MAAJ 5609 [0.5 credit] (MCG 5169) **Topics in Reliability Engineer**

MAAJ 5652 [0.5 credit] (MCG 5362) **Failure Prevention**

MAAJ 5655 [0.5 credit] Finite Element Analysis I Also listed as MECH 5605.

MAAJ 5656 [0.5 credit] The Boundary Element Method Includes: Experiential Learning Activity Also listed as MECH 5607.

MAAJ 5657 [0.5 credit] Creative Problem Solving and Design Also listed as MECH 5601.

MAAJ 5659 [0.5 credit] **Microstructure and Properties of Materials** Also listed as MECH 5609.

MAAJ 5700 [0.5 credit] (MCG 5170) CAD/CAM Includes: Experiential Learning Activity

MAAJ 5701 [0.5 credit] (MCG 5171) **Applied Reliability Theory**

MAAJ 5702 [0.5 credit] (MCG 5172) Mgmt of Automation

MAAJ 5703 [0.5 credit] (MCG 5173) Systems Engineer and Integration

MAAJ 5706 [0.5 credit] (MCG 5176) **Industrial Control Systems** Includes: Experiential Learning Activity

MAAJ 5707 [0.5 credit] (MCG 5177) **Robot Mechanics**

MAAJ 5708 [0.5 credit] (MCG 5178) Advanced Topics in CAD/CAM Includes: Experiential Learning Activity

MAAJ 5709 [0.5 credit] (MCG 5179) **Manufacturing System Analysis**

MAAJ 5750 [0.5 credit] **Surfaces and Coatings** Also listed as MECH 5700.

MAAJ 5751 [0.5 credit] (MCG 5369) **Metallic Phases and Transformations**

MAAJ 5800 [0.5 credit] (MCG 5180) Fibre Composite Materials II

MAAJ 5801 [0.5 credit] (MCG 5181) Advanced Vibrations

MAAJ 5802 [0.5 credit] (MCG 5182) Theory of Elastic Instability

MAAJ 5804 [0.5 credit] (MCG 5184) Mechatronics

MAAJ 5805 [0.5 credit] (MCG 5185) Multivariate Digital Control

MAAJ 5806 [0.5 credit] (MCG 5186) Non-Linear Disc Dyn and Control

MAAJ 5850 [0.5 credit]
Special Topics in Mechanical and Aerospace
Engineering
Also listed as MECH 5800.

MAAJ 5851 [0.5 credit] (MCG 5380) Safety and Risk Assessment of Nuclear Power

MAAJ 5852 [0.5 credit] Special Topics in Mechanical and Aerospace Engineering Also listed as MECH 5802.

MAAJ 5853 [0.5 credit] Special Topics in Mechanical and Aerospace Engineering

Also listed as MECH 5803.

MAAJ 5854 [0.5 credit] Special Topics in Mechanical and Aerospace Engineering Also listed as MECH 5804.

MAAJ 5855 [0.5 credit]
Special Topics in Mechanical and Aerospace
Engineering
Also listed as MECH 5805.

MAAJ 5857 [0.5 credit]
Special Topics in Mechanical and Aerospace
Engineering
Also listed as MECH 5807.

MAAJ 5858 [0.5 credit]
Special Topics in Mechanical and Aerospace
Engineering

Also listed as MECH 5808.

MAAJ 5901 [0.5 credit] (MCG 5191) Combustion in Premixed Systems

MAAJ 5902 [0.5 credit] (MCG 5192) Combustion in Diffusion System