

# Mech and Aero - Joint (MAAJ)

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## 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 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

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

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

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

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

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 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 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 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 5700 [0.5 credit] (MCG 5170)  
CAD/CAM

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**

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

**MAAJ 5708 [0.5 credit] (MCG 5178)**  
**Advanced Topics in CAD/CAM**

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

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

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

**Summer session:** some of the courses listed in this Calendar are offered during the summer. Hours and scheduling for summer session courses will differ significantly from those reported in the fall/winter Calendar. To determine the scheduling and hours for summer session classes, consult the class schedule at [central.carleton.ca](http://central.carleton.ca)

Not all courses listed are offered in a given year. For an up-to-date statement of course offerings for the current session and to determine the term of offering, consult the class schedule at [central.carleton.ca](http://central.carleton.ca)