

NITEC IN TECHNOLOGY - AEROSPACE MACHINING TECHNOLOGY

Course Code: NTASM / Plan Code: NTASM

COURSE OBJECTIVE

This course provides students with the skills and knowledge to produce aerospace components by planning and carrying out the operations using CAD/CAM system and multi-axis CNC machining centres.

COURSE STRUCTURE

S/N	Module Details	Module Code	Module Objectives
M1	Engineering & Inspection Techniques 42 hrs (T) 78 hrs (P) Credits: 6 Prerequisite: Nil	MT2101FP	On completion of the module, students should be able to interpret technical drawings and perform dimensional inspections for the machined components in accordance with ISO standards.
		Equivalent Code Nil	
M2	Engineering Process (Turning) 42 hrs (T) 78 hrs (P) Credits: 6 Prerequisite: Nil	MT2102FP	On completion of the module, students should be able to set up and operate centre lathes and CNC lathes to produce components in accordance with given specifications.
		Equivalent Code Nil	
M3	Engineering Process (Milling) 42 hrs (T) 78 hrs (P) Credits: 6 Prerequisite: Nil	MT2103FP	On completion of the module, students should be able to set up and operate conventional milling machines and CNC milling machines to produce components in accordance with given specifications.
		Equivalent Code Nil	
M4	3D CAD/CAM Applications 42 hrs (T) 78 hrs (P) Credits: 6 Prerequisite: Nil	MT2104FP	On completion of the module, students should be able to interpret engineering drawings, create 3D CAD models and generate & verify CNC part programs using a CAD/CAM system for CNC lathes and CNC milling machines.
		Equivalent Code MT2002PA	
M5	Aerospace Machining 42 hrs (T) 78 hrs (P) Credits: 6 Prerequisite: Advised to complete MT2101FP, MT2102FP, MT2103FP & MT2104FP	MT3102FP	On completion of the module, students should be able to develop part program for aerospace parts, set up and operate CNC high speed machining centres to manufacture engine and structural aerospace parts and components.
		Equivalent Code MT3101PA	
M6	Multi-Axis Programming & Machining 42 hrs (T) 78 hrs (P) Credits: 6 Prerequisite: Advised to complete MT2101FP, MT2102FP, MT2103FP & MT2104FP	MT3103FP	On completion of the module, students should be able to develop multi-axis part programs, set up and operate 5-axis CNC universal machining centres to manufacture components in a single set up for the aerospace and, oil & gas industries.
		Equivalent Code MT3102PA	

Abbreviations: T – Theory, P – Practical

CREDITS FOR CERTIFICATION

Total of 36 credits from successful completion of 6 modules.

VENUE

ITE College Central

Note:

- 1) The training schedule of lessons is subject to change.
- 2) Depending on the demand, not all the modules in the CET *Nitec* in Technology courses will be offered in each intake. Where the modules are offered and there is insufficient enrolment, the classes will be cancelled and a full refund will be given to the affected students.