

Faculty of Engineering & Technology

Production Technology

Information :

Course Code : MAN 121

Level : Undergraduate

Course Hours : 2.00- Hours

Department : Faculty of Engineering & Technology

Instructor Information :

Title	Name	Office hours
Professor	Maher Mohamed Aboelhassan Nofal	1
Lecturer	SAMAH ELSAYED ELMETWALLY ELKHATIB	1
Lecturer	Sherif Fathy Ahmed Mehanny	
Assistant Lecturer	Moustafa Raafat Aziz Shousha	
Teaching Assistant	Ahmed Ibrahim Sadek Mostafa Elgindy	
technician	Ahmed Hassan Fares Fargaly	
technician	Essam Mostafa Mohamed Hamed	
technician	Abdel Samad Taha Mahmoud Ahmed Abdelkarim	
technician	Mohamed Mounir Mohamed Mousa Al wakeel	
technician	Bayomi Abul Sabae Mohamed Bayomi	
technician	Saleh Mostafa El Sayed Ali Youssif	
technician	Bayomi Abul Sabae Mohamed Bayomi	
technician	Abdel Samad Taha Mahmoud Ahmed Abdelkarim	
technician	Khaled Osman Seer El Khatm Naqeeb	
technician	Essam Mostafa Mohamed Hamed	
technician	Ahmed Hassan Fares Fargaly	
technician	Mohamed Mounir Mohamed Mousa Al wakeel	
technician	Bayoumy Mohamed Abdelkawy Bayoumy	
technician	Ahmed Hassan kotb Ibrahim	
technician	Ahmed Shafik Elsayed Sakr	

Area Of Study :

Engineering materials: material structure and properties, metallic alloys and equilibrium diagrams, Metal forming: casting, forging, rolling, drawing, extrusion and spinning, Welding and riveting: soldering, brazing, electric arc welding, cold pressure and friction welding, electric resistance welding, spot, seam and projection welding, Metal cutting: hand tools and machining processes, centre lathe, shaper and drill, Measuring instruments, lengths and angles, specifications and standardization, Elements of production management systems and cost of production.

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Course outcomes :

a.Knowledge and Understanding: :

1 -	Identify engineering material, classification, selection, properties and testing
2 -	Explain the principles and techniques of casting process
3 -	Explain the principles and different types of forming process
4 -	Explain the principles and different types of machining process
5 -	Explain the principles and different types of joining and inspection process
6 -	Identify the different aspect is affecting process selection

b.Intellectual Skills: :

1 -	Apply a proper material to a certain product
2 -	Select a suitable manufacturing process to produce a certain product
3 -	Select alternative solutions according to different given constrains
4 -	Determine the important factors affecting material and process selection

c.Professional and Practical Skills: :

1 -	Practice safely and accurately simple workshop hand tools
2 -	Distinguish safely and accurately workshop Equipment
3 -	Classify the required process selection factors

d.General and Transferable Skills: :

1 -	Verify the technical report in oral seminar
2 -	Effectively manage tasks, time, and resources
3 -	Estimate as a part of a project team in building real case study.

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction	4	1	1
Workshop Hand Tools	4	1	1
Properties of Material	4	1	1
Classification and Selection of Materials	4	1	1
Principle of Metals Casting	4	1	1
Casting Process	4	1	1
Principle of Metal Forming	4	1	1
Bulk Metal Forming	4	1	1
Sheet Metal Forming	4	1	1
Polymer Forming	4	1	1
Machining Fundamentals	4	1	1
Machining Processes	8	2	2
Joining of Metals	4	1	1
Quality Inspection and other Aspects Related to Manufacturing	4	1	1

Teaching And Learning Methodologies :

Interactive Lecture

Discussion

Problem-based Learning

Report

Experiential Learning

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Assignment	5.00		
Final Exam	40.00		
Lab Exper.	5.00		
Mid- Exam 1I	20.00		
Mid- Exam I	20.00		
Oral Exam	5.00		
Quizzes	5.00		

Course Notes :

Recommended books :

Periodicals :

Web Sites :