

GOVERNMENT COLLEGE OF ENGINEERING, SALEM-11

(An Autonomous Institution, Affiliated to Anna University, Chennai)

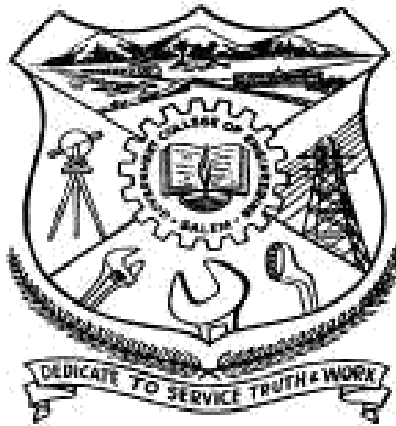
M.E., WELDING TECHNOLOGY

REGULATIONS – 2018

CURRICULUM

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SYLLABUS



DEPARTMENT OF METALLURGICAL ENGINEERING

GOVERNMENT COLLEGE OF ENGINEERING

SALEM – 636 011

GOVERNMENT COLLEGE OF ENGINEERING, SALEM – 636 011.

Curriculum 2018 - Autonomous Courses
(For Students Admitted from 2018 – 2019)

M.E. WELDING TECHNOLOGY – Full Time

Course code	Name of the Course	Hours/Week						Maximum Marks		
		Category	Contact periods	Lecture	Tutorial/ Demo*	Practical	Credit	CA	FE	Total
SEMESTER I										
18WTC11	Advanced Mathematics and Statistics	Core	3	3	-	-	3	40	60	100
18WTC12	Welding Processes – I	Core	3	3	-	-	3	40	60	100
18WTE__	Elective - I	Elect 1	3	3	-	-	3	40	60	100
18WTE__	Elective - II	Elect 2	3	3	-	-	3	40	60	100
18WTC13	Metallography Lab	Core	4	-	-	4	2	40	60	100
18WTC14	Welding Lab	Core	4	-	-	4	2	40	60	100
18MLC01	Research Methodology and IPR	MLC	3	3	-	-	3	40	60	100
18AC____	Audit course – 1	Audit	2	2	-	-	0			
TOTAL			25	17	-	8	19	-	-	700
SEMESTER II										
18WTC21	Welding Processes – II	Core	3	3	-	-	3	40	60	100
18WTC22	Welding Metallurgy	Core	3	3	-	-	3	40	60	100
18WTE__	Elective – III	Elect 3	3	3	-	-	3	40	60	100
18WTE__	Elective - IV	Elect 4	3	3	-	-	3	40	60	100
18WTC23	Quality control in Weldments Lab	Core	4	-	-	4	2	40	60	100
18WTC24	Materials Characterization Lab	Core	4	-	-	4	2	40	60	100
18WTC25	Mini Project		4	-	-	4	2	40	60	100
18AC____	Audit course – 2	Audit	2	2	-	-	0			
TOTAL			26	14	-	12	18	-	-	700
SEMESTER III										
18WTE__	Elective - V	Elect5	3	3	-	-	3	40	60	100
18WTE__	Elective - VI	Elect6	3	3	-	-	3	40	60	100
18WTC31	Dissertation Phase – I	Core	20	-	-	20	10	80	120	200
TOTAL			26	6	-	20	16			400
SEMESTER IV										
18WTC41	Dissertation Phase – II	Core	32	-	-	32	16	160	240	400
TOTAL			32	-	-	32	16			400

Total Credits for the programme = 19 + 18 + 16 + 16 = 69

Course Code	Name of Course
Elective I	
18WTE11	Electrical Aspects of Welding
18WTE12	Design of Weldments
18WTE13	Welding Economics, Management and Safety
Elective II	
18WTE21	Materials and Behaviour
18WTE22	Failure Analysis in Weldments
18WTE23	Non - metallic Materials
Elective III	
18WTE31	Testing and Inspection of Weldments
18WTE32	Finite Element Analysis
18WTE33	Total Quality System and Engineering
Elective – IV	
18WTE41	Materials Characterization
18WTE42	Automation and Robots in Welding
18WTE43	Welding Application Technology
Elective –V	
18WTE51	Corrosion and Surface Engineering
18WTE52	Composite Materials
18WTE53	Industrial Safety
Elective –VI	
18WTE61	Welding Codes and Standards
18WTE62	Brazing, Soldering, Surfacing and Cutting
18WTE63	Waste to Energy

Course Code	Name of Course
18AC01	English for Research Paper Writing
18AC02	Disaster Management
18AC03	Sanskrit for Technical Knowledge
18AC04	Value Education
18AC05	Constitution of India
18AC06	Pedagogy Studies

18AC07	Stress Management by Yoga
18AC08	Personality Development through Life Enlightenment Skills