

**DAV UNIVERSITY, JALANDHAR**

**DAV UNIVERSITY JALANDHAR**



**Course Scheme & Syllabus**

**Master of Technology  
(Part Time)**

**In**

**Electrical Engineering**

**Session 2016–2017 (Onwards)**

## DAV UNIVERSITY, JALANDHAR

### M Tech (Mechanical Engineering)-Part Time

Semester	Course Code	Course Title	L	T	P	Cr	Nature of Course
1	MGT551	Research Methodology	4	0	0	4	Core
1	ELE501A	Modern Power System Analysis	4	0	0	4	Core
1	ELE505A	Electrical Power System Laboratory	0	0	4	2	Core (Lab)
			<b>8</b>	<b>0</b>	<b>4</b>	<b>10</b>	
Semester	Course Code	Course Title	L	T	P	Cr	Nature of Course
2	ELE502A	Power System Dynamics	4	0	0	4	Core
2	ELE503A	Advanced Electric Drives	4	0	0	4	Core
2	ELE506A	Power System Dynamics Laboratory	0	0	4	2	Core (Lab)
			<b>8</b>	<b>0</b>	<b>4</b>	<b>10</b>	
Semester	Course Code	Course Title	L	T	P	Cr	Nature of Course
3	ELE504	Power System Operation and Control	4	0	0	4	Core
3	ELE511	Power System Optimization	3	0	0	3	Core
		Discipline Specific Elective -1	4	0	0	4	DSE-1
3	ELE516	Power System Optimization Laboratory	0	0	2	1	Core(Lab)
			<b>11</b>	<b>0</b>	<b>2</b>	<b>12</b>	
Semester	Course Code	Course Title	L	T	P	Cr	Nature of Course
4		Discipline Specific Elective -2	4	0	0	4	DSE-2
4		Discipline Specific Elective -3	4	0	0	4	DSE-3
4		Generic Elective -1	4	0	0	4	GE-1
4	ELE550	Seminar	0	0	3	2	Seminar
			<b>12</b>	<b>0</b>	<b>3</b>	<b>14</b>	
Semester	Course Code	Course Title	L	T	P	Cr	Nature of Course
5		Discipline Specific Elective -4	4	0	0	4	DSE-4
5		Generic Elective -2	4	0	0	4	GE-2
5	ELE600	Dissertation Part - 1	0	0	0	8	Dissertation Part - 1
			<b>8</b>	<b>0</b>	<b>0</b>	<b>16</b>	
Semester	Course Code	Course Title	L	T	P	Cr	Nature of Course
6	ELE700	Dissertation Part - 2	0	0	0	12	Dissertation Part - 2
			<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	

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## Discipline Specific Electives

DSE-1	Course Code	Course Title	L	T	P	Cr.	Area of Specialization
	ELE514A	Design of Electrical Machines	4	0	0	4	Electric Drives
	ELE621A	Power System Planning and Reliability	4	0	0	4	Power System
	ELE651	Computer Aided Design of Electrical Machines	4	0	0	4	Machine Design
	ELE652	Power System Transients	4	0	0	4	Power Electronics

DSE-2	Course Code	Course Title	L	T	P	Cr.	Area of Specialization
	ELE517	Advanced Power Electronics and Drives	4	0	0	4	Power Electronics
	ELE513	HVDC/EHVAC Transmission	4	0	0	4	Power System
	ELE670	Automatic Control of DC drives	4	0	0	4	Control and Automation
	ELE663	Special Electric Machines	4	0	0	4	Electric Drives

DSE-3	Course Code	Course Title	L	T	P	Cr.	Area of Specialization
	ELE653	Flexible AC Transmission Systems	4	0	0	4	Power Electronics
	ELE654	Power Station Design	4	0	0	4	Power System
	ELE655	High Voltage Engineering and Test Techniques	4	0	0	4	Design
	ELE658	Power System Reliability	4	0	0	4	Power System

DSE-4	Course Code	Course Title	L	T	P	Cr.	Area of Specialization
	ELE659	Energy Auditing, Conservation and Management	4	0	0	4	Energy Audit
	ELE660	Organization and Finance in Power Sector	4	0	0	4	Power System
	ELE661	Distribution Automation	4	0	0	4	Distribution System
	ELE662	Renewable Energy Resources	4	0	0	4	Energy Sources

**L: Lectures T: Tutorial P: Practical Cr: Credits**

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## Generic Electives

S. No	Course Code	Course Title	L	T	P	Cr.
1	ELE901	Renewable Energy Sources	4	0	0	4
2	ELE902	Energy Audit and Management	4	0	0	4
3	CHL901	Analytical Techniques	4	0	0	4
4	CHL902	Pollution Abatement and Control Equipment's	4	0	0	4
5	MEC901	Methods Engineering and Ergonomics	4	0	0	4
6	MEC902	Power Plant Engineering	4	0	0	4
7	CSE901	Soft Computing	4	0	0	4
8	CSE902	Mobile Communications	4	0	0	4
9	ECE901	Smart Sensors	4	0	0	4
10	ECE902	Silicon Chip Technology	4	0	0	4
11	CIV901	Transportation Engineering	4	0	0	4
12	CIV902	Water Resource Engineering	4	0	0	4
13	MGT051	Business Strategy	4	0	0	4
14	MGT052	Principles of Marketing	4	0	0	4