

Madhav Institute of Technology & Science, Gwalior

List of MOOCs Courses offered under Flexible Curriculum Scheme for students desirous of securing Honour/Minor specialization July-Dec 2019)

Name of Department	Purpose	Name of Courses	Duration of Course (In Weeks)	Course Registration Last Date	Name of Mentor Faculty(One Regular & one NPIU)	URL link for Registration	
Electrical Engineering	Minor Specialization for students of Other Departments	Power Electronics	12 Weeks	05/Aug/19	Prof. H.M. Dubey, Prof. M. Kumar	https://swayam.gov.in/nd1_noc19_ee37/	
		Electrical Machines - I	12 Weeks	05/Aug/19	Prof. P. Bansal, Prof. N. Gupta	https://swayam.gov.in/nd1_noc19_ee60/	
		Power System Analysis	12 Weeks	05/Aug/19	Prof. S. Dixit, Prof. S. Kumari	https://swayam.gov.in/nd1_noc19_ee62/	
		Control Engineering	12 Weeks	05/Aug/19	Prof. A. Patra, Dr.Vikram	https://swayam.gov.in/nd1_noc19_ee42/	
	Honors for students of Electrical Engineering Department	Sensors and Actuators	12 Weeks	05/Aug/19	NA	https://swayam.gov.in/nd1_noc19_ee41/	
		Neural Networks for Signal Processing-I	12 Weeks	05/Aug/19		https://swayam.gov.in/nd1_noc19_ee53/	
		Electrical Distribution System analysis	8 Weeks	05/Aug/19		https://swayam.gov.in/nd1_noc19_ee61/	
		DC Microgrid	8 Weeks	05/Aug/19		https://swayam.gov.in/nd1_noc19_ee63/	
		Introduction to Smart Grid	8 Weeks	05/Aug/19		https://swayam.gov.in/nd1_noc19_ee64/	
		Advanced Linear Continuous Control Systems: Applications with MATLAB Programming and Simulink	8 Weeks	05/Aug/19		https://swayam.gov.in/nd1_noc19_ee45/	
		Linear System Theory	12 Weeks	05/Aug/19		https://swayam.gov.in/nd1_noc19_ee43/	
	Self Study (III SEM)	Students may choose any course of their own choice from available list of MOOCs Courses in SWAYAM/NPTEL or any other platform					
	Self Study (V SEM)						
	Electronics Engineering	Minor Specialization for students of Other Departments	Switching circuits and logic design	12 Weeks	5-Aug-19	Dr Laxmi Shrivastav Mr Rishabh Shukla	https://swayam.gov.in/nd1_noc19_cs74/preview
Power electronics			8 Weeks	5-Aug-19	Mr D K Parseodia Miss Arpita Singhal	https://swayam.gov.in/nd1_noc19_ee37/preview	
Honors for students of EC/ET Engineering Department		Computer Vision	12 Weeks	5-Aug-19	NA	https://swayam.gov.in/nd1_noc19_cs58/preview	
		Cloud computing	8 Weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_cs64/preview	
		Solid State Physics	12 Weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_ph14/preview	
		Switching circuits and logic design	12 Weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_cs74/preview	
		Power electronics	12 Weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_ee37/preview	
		Solar Photovoltaics, fundamental, technology & Application	8 Weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_ph13/preview	
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Self Study(VSEM)							
Civil Engineering	Minor Specialization for students of other departments	Concrete Technology	12 weeks	5-Aug-19	Prof. A. Tiwari , Dr. Pankaj Kumar	https://swayam.gov.in/nd1_noc19_ce20/preview	
		Sustainable materials & Green Building	12 weeks	5-Aug-19	Prof. A.K. Saxena, Prof. Nishi Gangwar	https://swayam.gov.in/nd1_noc19_ce40/preview	
		Introduction to Environmental Engineering & Science Fundamental & sustainability concepts	12 weeks	5-Aug-19	Prof. D. Rastogi, Prof. Chetan Sharma	https://swayam.gov.in/nd1_noc19_ge22/preview	
	Honors for students of Civil Engineering Department	Integrated waste management for a smart city	12 weeks	5-Aug-19	NA	https://swayam.gov.in/nd1_noc19_ce31/preview	
		Sustainable materials & Green Building	12 weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_ce40/preview	
		Matrix method of structural analysis	8 weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_ce33/preview	
		Design of Masonary Structures	12 weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_ce21/preview	
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	Self Study(VSEM)						

Mechanical Engineering	Minor Specialization for students of other departments	Fundamentals of manufacturing processes	12 Weeks	5-Aug-19	Dr. Amit Aherwar Prof. Kaustubh Khot	https://swayam.gov.in/nd1_noc19_me44/
		Concepts of Thermodynamics	12 Weeks	5-Aug-19	Prof.Bhupendra Pandey Prof. Utkarsh Srivastava	https://swayam.gov.in/nd1_noc19_me56/preview
	Honors for students of Mechanical Engineering Department	Advanced Concepts in Fluid Mechanics	12 Weeks	5-Aug-19	NA	https://swayam.gov.in/nd1_noc19_me53/
		System Design for Sustainability	12 Weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_de03/
		Turbulent Combustion: Theory and Modelling	12 Weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_me64/
		Manufacturing Systems Technology Part I & II	12 Weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_me45/
		Plastic Working Of Metallic Materials	12 Weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_me66/
		Fundamentals of manufacturing processes	12 Weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_me44/
		Mathematical Modeling Of Manufacturing Processes	12 Weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_me47/
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Chemical Engineering	Minor Specialization for students of other Department	Heat Transfer	12 Weeks	5-Aug-19	Prof.Anish P.Jacob & Dr. R.K. Dubey	https://swayam.gov.in/nd1_noc19_ch23/preview
		Fundamentals of Particle & Fluid Solid Processing	12 Weeks	5-Aug-19	Prof. Anish P. Jacob & Dr. A.N.Sarve	https://www.swayam.gov.in/nd1_noc19_ch29/preview
		Chemical Reaction Engineering-I	12 Weeks	5-Aug-19	Prof.Swati Gupta & Prof. Pratap Singh	https://swayam.gov.in/nd1_noc19_ch20/preview
	Honors for students of Chemical Engineering Department	Flow through porous media	12 Weeks	5-Aug-19	Prof.Anish.P.Jacob & Prof. A.Srinath	https://swayam.gov.in/nd1_noc19_ch21/preview
		Technologies For Clean And Renewable Energy Production	8 Weeks	5-Aug-19	Prof.Swati Gupta & Dr. K. Samal	https://swayam.gov.in/nd1_noc19_ch26/preview
		Chemical Process Intensification	12 Weeks	5-Aug-19	Prof.Swati Gupta & Prof. Arti Sahu	https://www.swayam.gov.in/nd1_noc19_ch18/preview
		Fundamentals of Particle & Fluid Solid Processing	12 Weeks	5-Aug-19	Prof. Anish P. Jacob & Dr. A.N.Sarve	https://www.swayam.gov.in/nd1_noc19_ch29/preview
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CSE & IT Engineering	Minor Specialization for students of Other department	Operating System Fundamentals	12 weeks	5-Aug-19	Prof. Neha Bhardwaj, Prof. Julie Kumari	https://swayam.gov.in/nd1_noc19_cs51/preview	
		Database Management System	8 weeks	5-Aug-19	Prof. Jaimala Jha, Prof. Mir Shanawaz Ahmad	https://swayam.gov.in/nd1_noc19_cs46/preview	
		Object oriented analysis and design	8 weeks	5-Aug-19	Prof. Mahesh Parmar, Prof. Sneha Garg	https://swayam.gov.in/nd1_noc19_cs48/preview	
	Honors for students of CSE/IT Engineering Department	Advanced Computer Architecture	8 weeks	5-Aug-19	NA	https://swayam.gov.in/nd1_noc19_cs62/preview	
		Data Science for Engineers	8 weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_cs60/preview	
		The Joy of Computing using Python	12 weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_cs41/	
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Self Study (V SEM)							
Architecture	Honors for students of Architecture Department	Culturally responsive built environment	8 Weeks	26-Aug-19	NA	https://swayam.gov.in/nd1_noc19_ar13/	
		Contemporary Architecture and Design	8 Weeks	26-Aug-19		https://swayam.gov.in/nd1_noc19_ar14/	
		Principles of Construction Management (Civil)	8 Weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_ce29/	
		Glass in Buildings: Design and Applications (Civil)	12 Weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_ce42/	
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Biotechnology	Honors for students of Biotech Department	Plant Cell Bioprocessing	8 Weeks	26-Aug-19	NA	https://swayam.gov.in/nd1_noc19_bt18/	
		Industrial Biotechnology	12 Weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_bt20/	
		Nanotechnology in Agriculture	8 Weeks	26-Aug-19		https://swayam.gov.in/nd1_noc19_bt21/	
		Introduction to Mechanobiology	8 Weeks	5-Aug-19		https://swayam.gov.in/nd1_noc19_bt30/	
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	Self Study(VSEM)						