Following are the NPTEL courses permitted for credit transfer under UE category. Contact your School Academic Coordinator before registering in the SWAYAM / NPTEL platform.

Code	Title	Credit
MOC1901	Advanced Green Manufacturing Systems	3
MOC1902	Introduction to Cognitive Psychology	3
MOC1903	Introduction to Political Theory	3
MOC1904	Six Sigma	3
MOC1905	Emotional Intelligence	2
MOC1906	Manufacturing Strategy	2
MOC1907	Supply Chain Analytics	2
MOC1908	Systems Engineering: Theory and Practice	2
MOC1909	Design Thinking - A Primer	1
MOC1910	MCDM Techniques Using R and MARLAB	1
MOC1911	Perspectives on Neurolinguistic	1
MOC1912	Sociology of Science	1
MOC1913	Contemporary Themes in India's Economic Development and Economic Survey	3
MOC1914	Problem Solving through Programming in C	3
MOC1915	Design and Analysis of Algorithms	2
MOC1916	Computer Vision	3
MOC1917	Spatial Informatics	2
MOC1918	Practical Machine Learning with Tensorflow	2
MOC1919	Training of Trainers	3
MOC1920	Knowledge Management	2
MOC1921	Leadership	1
MOC1922	Educational Leadership	2
MOC1923	Cost Accounting	1
MOC1924	Practitioners Course In Descriptive, Predictive and Prescriptive Analytics	2
MOC1925	Decision-Making Under Uncertainty	1
MOC1926	Data Analysis and Decision Making - III	3
MOC1927	Business Analytics and Data Mining Modeling Using R Part II	1
MOC1928	Business Analytics and Text Mining Modeling Using Python	2
MOC1929	Economics of Health and Health Care	2
MOC1930	Human Resource Development	3
MOC1931	Performance and Reward Management	3
MOC1932	Corporate Social Responsibility	2
MOC1933	E-Business	3
MOC1934	Innovation, Business Models and Entrepreneurship	2
MOC1935	The Ethical Corporation	2

MOC1936	Toyota Production System	2
MOC1937	Intellectual Property Rights and Competition Law	2
MOC1938	Patent Search for Engineers and Lawyers	2
MOC1939	Role of Craft and Technology in Interior - Architecture	2
MOC1940	Glass In Buildings : Design And Applications	3
MOC1941	Visual Perception and Art: A Survey Across the Cultures	1
MOC1942	Mapping Signal Processing Algorithms to Architectures	3
MOC1943	Introduction to Computer Vision	3
MOC1944	Op-Amp Practical Applications: Design, Simulation and Implementation	3
MOC1945	Fabrication Techniques for MEMs- based sensors: clinical Perspective	3
MOC1946	Linear System Theory	3
MOC1947	Advanced Linear Continuous Control Systems: Applications with MATLAB Programming and Simulink	2
MOC1948	Introduction to Wireless and Cellular Communications	3
MOC1949	Digital Switching - I	2
MOC1950	Microelectronics: Devices To Circuits	3
MOC1951	Digital Image Processing	3
MOC1952	Pattern Recognition and Application	3
MOC1953	Microwave Theory and Techniques	3
MOC1954	Principles and Techniques of Modern Radar Systems	3
MOC1955	Computational Electromagnetics	3
MOC1956	Microwave Engineering	3
MOC1957	Introduction to parallel Programming in Open MP	1
MOC1958	Reinforcement Learning	3
MOC1959	Applied Natural Language Processing	3
MOC1960	Python for Data Science	1
MOC1961	Data Science for Engineers	2
MOC1962	Scalable Data Science	2
MOC1963	Advanced Computer Architecture	2
MOC1964	Software Project Management	3
MOC1965	Software testing	3
MOC1966	Hardware Modeling using Verilog	2
MOC1967	Synthesis of Digital Systems	3
MOC1968	Switching Circuits and Logic Design	3
MOC1969	Demystifying networking	1
MOC1970	Modern Algebra	2
MOC1971	Introduction to Haskell Programming	2
MOC1972	Flow through Porous Media	3
MOC1973	Bioenergy	2
MOC1974	Introduction to Biostatistics	2
MOC1975	Nanotechnology in Agriculture	2
MOC1976	Computer Aided Drug Design	2
MOC1977	Drug Delivery: Principles and Engineering	3

MOC1978	Functional Genomics	1
MOC1979	Introduction to Proteogenomics	3
MOC1980	Introduction to Mechanobiology	2
MOC1981	WildLife Conservation	2
MOC1982	Organic Chemistry in Biology and Drug Development	3
MOC1983	Bioinorganic Chemistry	1
MOC1984	Spectroscopic Techniques for Pharmaceutical and Biopharmaceutical Industries	3
MOC1985	Biophysical chemistry	3
MOC1986	Deep Learning	3
MOC1987	Blockchain Architecture Design and use Cases	3
MOC1988	Ethical Hacking	3
MOC1989	Organic Farming for Sustainable Agricultural Production	2
MOC1990	Positive Psychology	2
MOC1991	Forests and their Management	3
MOC1992	Forest Biometry	2
MOC1993	Bioengineering: An Interface with Biology and Medicine	2
MOC1994	Human Molecular Genetics	1
MOC1995	Bioenergetics of Life Processes	1
MOC1996	Computational Systems Biology	3
MOC1997	Bio-Informatics: Algorithms and Applications	3
MOC1998	Biostatistics and Design of Experiments	2
MOC1999	Medical Biomaterials	2
MOC2000	Demystifying the Brain	1
MOC2001	Principles and Applications of NMR Spectroscopy	2
MOC2002	Cell Culture Technologies	2
MOC2003	Natural Hazards	2
MOC2004	Modern Construction Materials	3
MOC2005	Energy Efficiency, Acoustics and Daylighting in Building	3
MOC2006	Fire Protection, Services and Maintenance Management of Building	3
MOC2007	Electronic Waste Management - Issues And Challenges	1
MOC2008	Higher Surveying	3
MOC2009	Environmental Remediation of Contaminated Sites	3
MOC2010	Soil Structure Interaction	3
MOC2011	Introduction to Accounting and Finance for Civil Engineers	2
MOC2012	Scheduling Techniques in Projects	1
MOC2013	GPS Surveying	1
MOC2014	Sustainable Materials and Green Buildings	3
MOC2015	Geomorphic Processes: Landforms and Landscapes	2
MOC2016	Introduction To Process Modeling in the Membrane Separation Process	1
MOC2017	Computational Geometry	3
MOC2018	Compiler Design	3
MOC2019	Embedded System Design with ARM	2

MOC2020	VLSI Physical Design	3
MOC2021	Cloud computing	2
MOC2022	Artificial Intelligence : Knowledge Representation And Reasoning	3
MOC2023	Privacy and Security in Online Social Media	2
MOC2024	Information Security - 5 - Secure Systems Engineering	2
MOC2025	Model Checking	3
MOC2026	Randomized Algorithms	3
MOC2027	GPU Architectures and Programming	3
MOC2028	Multi-Core Computer Architecture - Storage and Interconnects	2
MOC2029	Data Analytics with Python	3
MOC2030	Arithmetic Circuit Complexity	3
MOC2031	Google Cloud Computing Foundation Course	2
MOC2032	Consumer Behaviour	2
MOC2033	Enhancing Soft Skills and PersonalityÂ	2
MOC2034	Introduction to Airplane Performance	2
MOC2035	Rocket Propulsion	3
MOC2036	Aircraft Maintenance	1
MOC2037	Sustainable Architecture	3
MOC2038	Introduction to History of Architecture in India	1
MOC2039	Structure, Form, and Architecture : The Synergy	2
MOC2040	Interactomics : Basics and Applications	3
MOC2041	Introduction to Professional Scientific Communication	1
MOC2042	Material and Energy Balances	3
MOC2043	Thermodynamics for Biological Systems: Classical and Statistical Aspect	3
MOC2044	Optical Spectroscopy and Microscopy : Fundamentals of Optical Measurements and Instrumentation	3
MOC2045	Fundamentals of Semiconductor Devices	3
MOC2046	Characterization of Construction Materials	3
MOC2047	Introduction to Civil Engineering Profession	2
MOC2048	Environmental Geomechanics	3
MOC2049	Mechanical Characterization of Bituminous Materials	3
MOC2050	Geosynthetics and Reinforced Soil Structures	3
MOC2051	Geotechnical Engineering II Foundation Engineering	3
MOC2052	Landscape Architecture and Site Planning - Basic Fundamentals	2
MOC2053	Plastic Waste Management	2
MOC2054	Advanced Topics in the Science and Technology of Concrete	1
MOC2055	Applied Environmental Microbiology	3
MOC2056	Digital Land Surveying And Mapping (DLS&M)	2
MOC2057	Earthquake Geology: A tool for Seismic Hazard Assessment	3

MOC2058	Introduction to Geographic Information Systems	1
MOC2059	Structural Dynamics	3
MOC2060	Water Supply Engineering	3
MOC2061	Geo Spatial Analysis in Urban Planning	1
MOC2062	Geotechnical Engineering - 1	3
MOC2063	Maintenance and Repair of Concrete Structures	3
MOC2064	Thermodynamics	3
MOC2065	Geomorphology	3
MOC2066	Remote Sensing Essentials	3
MOC2067	Hydraulic Engineering	3
MOC2068	Environmental Quality Monitoring and Analysis	3
MOC2069	Electrochemical Technology in Pollution Control	2
MOC2070	Advanced Thermodynamics	3
MOC2071	Membrane Technology	3
MOC2072	Computational Fluid Dynamics	3
MOC2073	Transport phenomena	3
MOC2074	Optimization in Chemical Engineering	3
MOC2075	Soft Nano Technology	2
MOC2076	Transport processes I - Heat and Mass Transfer	3
MOC2077	Process Control - Design, Analysis and Assessment	3
MOC2078	Heat Transfer	3
MOC2079	Chemical Reaction Engineering II	3
MOC2080	Multiphase Flows	2
MOC2081	Mass Transfer Operations - I	3
MOC2082	Waste to Energy Conversion	2
MOC2083	Equipment Design : Mechanical Aspects	1
MOC2084	An Introduction to Cardiovascular Fluid Mechanics	1
MOC2085	Computer Aided Applied Single Objective Optimization	2
MOC2086	Basic Principles and Calculations in Chemical Engineering	3
MOC2087	Introduction to Blockchain Technology and Applications	2
MOC2088	Foundations of Cryptography	3
MOC2089	Introduction to Database Systems	3
MOC2090	Operating System	3
MOC2091	Programming in C++	2
MOC2092	Programming in Java	3
MOC2093	Data Base Management System	2
MOC2094	Introduction to Algorithms and Analysis	3
MOC2095	Data Mining	2
MOC2096	Embedded Systems Design	3
MOC2097	Real Time Operating System	1
MOC2098	Introduction to Soft Computing	2
MOC2099	Cryptography and Network Security	3
MOC2100	Introduction to Internet of Things	3
MOC2101	Computer Networks and Internet Protocol	3

MOC2102	Introduction to Industry 4.0 and Industrial Internet of Things	3
MOC2103	Computer Architecture	3
MOC2104	Programming, Data Structures And Algorithms Using Python	2
MOC2105	Introduction to Machine Learning	3
MOC2106	Social Networks	3
MOC2107	Foundations to Computer Systems Design	3
MOC2108	The Joy of Computing using Python	3
MOC2109	Discrete Mathematics	3
MOC2110	An Introduction to Artificial Intelligence	3
MOC2111	User-centric Computing for Human-Computer Interaction	3
MOC2112	Cloud Computing and Distributed Systems	2
MOC2113	Machine Learning	2
MOC2114	Modern Application Development	3
MOC2115	An Introduction To Programming Through C++	3
MOC2116	Design and Pedagogy of the Introductory Programming Course	1
MOC2117	Quantitative Methods in Chemistry	3
MOC2118	Basics in Inorganic Chemistry	1
MOC2119	Ultrafast Laser Spectroscopy	3
MOC2120	Transition Metal Organometallics in Catalysis and Biology	3
MOC2121	Essentials of Biomolecules : Nucleic Acids and Peptides	3
MOC2122	Fundamentals of Spectroscopy	3
MOC2123	Advanced Chemical Thermodynamics and Kinetics	3
MOC2124	Biochemistry	3
MOC2125	Organometallic Chemistry	1
MOC2126	Chemical Applications of Symmetry and Group Theory	2
MOC2127	Basic Thermodynamics : Classical and Statistical Approaches	3
MOC2128	Medicinal Chemistry	3
MOC2129	Design, Technology and Innovation	2
MOC2130	Geographic Information System	3
MOC2131	Product Design and Innovation	1
MOC2132	Fundamentals of Automotive Systems	3
MOC2133	Electronics Equipment Integration and Prototype Building	2
MOC2134	High Power Multilevel Converters-Analysis, Design and Operational Issues	3
MOC2135	Fuzzy Sets, Logic and Systems and Applications	3
MOC2136	Transmission Lines and Electromagnetic Waves	3
MOC2137	Digital IC Design	3
MOC2138	Signals and Systems	3
MOC2139	Power Management Integrated Circuits	3
MOC2140	DC Power Transmission Systems	3
MOC2141	Microprocessors and Interfacing	3

MOC2142	Design and Simulation of Power Conversion using Open Source Tools	1
MOC2143	Integrated Circuits, MOSFETs, OP-Amps and their Applications	3
MOC2144	Electronic Systems for Cancer Diagnosis	3
MOC2145	Principles of Signals and Systems	3
MOC2146	Principles of Communication Systems - I	3
MOC2147	Principles of Digital Communication	3
MOC2148	Electric Vehicles - Part 1	1
MOC2149	Nonlinear Adaptive Control	1
MOC2150	Antennas	3
MOC2151	Multirate DSP	3
MOC2152	Control Engineering	3
MOC2153	Introduction to Photonics	3
MOC2154	Microwave Integrated Circuits	2
MOC2155	Analog IC Design	3
MOC2156	Analog Circuits	3
MOC2157	Advance Power Electronics and Control	2
MOC2158	CMOS Digital VLSI Design	2
MOC2159	Analog Circuits and Systems through SPICE Simulation	3
MOC2160	Discrete Time Signal Processing	2
MOC2161	Digital Electronic Circuits	3
MOC2162	Fundamentals of MIMO Wireless Communication	2
MOC2163	Spread Spectrum Communications and Jamming	3
MOC2164	Basic Building Blocks of Microwave Engineering & Design Principles of RF and Microwave Filters and Amplifiers	2
MOC2165	Evolution of Air Interface towards 5G	2
MOC2166	Architectural Design of Digital Integrated Circuits	3
MOC2167	Electrical Machines - II	3
MOC2168	Medical Image Analysis	1
MOC2169	Biomedical Signal Processing	3
MOC2170	Microprocessors And Microcontrollers	3
MOC2171	Recent Advances in Transmission Insulator	1
MOC2172	VLSI Signal Processing	2
MOC2173	Analog Electronic Circuits	3
MOC2174	Network Analysis	3
MOC2175	Optical Engineering	3
MOC2176	Mathematical Methods and Techniques in Signal Processing	3
MOC2177	A brief introduction of Micro â€" Sensors	1
MOC2178	Statistical Signal Processing	3
MOC2179	Nonlinear System Analysis	3
MOC2180	Ethics in Engineering Practice	2
MOC2181	Introduction to Research	2
MOC2182	Matlab Programming for Numerical Computation	2

MOC2183	Roadmap for Patent Creation	2
MOC2184	Entrepreneurship Essentials	3
MOC2185	Fuzzy Logic and Neural Networks	2
MOC2186	Microeconomics : Theory & Applications	3
MOC2187	Introduction to Environmental Economics	3
MOC2188	Energy Resources, Economics and Environment	3
MOC2189	Literary Criticism (From Plato to Leavis)	3
MOC2190	Twentieth Century Fiction	3
MOC2191	Effective Writing	1
MOC2192	Strategic Trade and Protectionism - Theories and Empirics	2
MOC2193	Introduction to Cultural Studies	3
MOC2194	Introduction to Basic Spoken Sanskrit	1
MOC2195	Speaking Effectively	2
MOC2196	Soft Skill Development	2
MOC2197	Intellectual Property	3
MOC2198	English Language for Competitive Exams	3
MOC2199	English Literature for competitive Exams	2
MOC2200	Language and Mind	2
MOC2201	The Nineteenth - Century English Novel	3
MOC2202	Introduction to World Literature	3
MOC2203	Patent Drafting for Beginners	1
MOC2204	Patent Law for Engineers and Scientists	3
MOC2205	Economic Growth & Development	2
MOC2206	Human Behaviour	2
MOC2207	Introduction to Modern Indian Political Thought	3
MOC2208	English Literature of the Romantic Period, 1798 - 1832	2
MOC2209	Literature, Culture and Media	3
MOC2210	Introduction to Brain & Behaviour	2
MOC2211	Modern Indian Writing in Translation	3
MOC2212	Introduction to Political Ideologies : Contexts, Ideas, and Practices	3
MOC2213	Indian Business History	2
MOC2214	German - II	3
MOC2215	German - I	3
MOC2216	Feminism : Concepts and Theories	3
MOC2217	An Introduction to Smooth Manifolds	3
MOC2218	Measure Theory	3
MOC2219	Basic Real Analysis	3
MOC2220	Probabilistic Methods in PDE	3
MOC2221	Graph Theory	2
MOC2222	Transform Calculus and its applications in Differential Equations	3
MOC2223	Integral and Vector Calculus	3
MOC2224	Basic Linear Algebra	2
MOC2225	Introduction to Rings And Fields	2

MOC2226	Numerical Methods : Finite Difference Approach	1
MOC2227	Numerical Linear Algebra	3
MOC2228	Ordinary and Partial Differential Equations and Applications	3
MOC2229	Advanced Engineering Mathematics	3
MOC2230	Mathematical Methods and its Applications	3
MOC2231	Multivariable Calculus	2
MOC2232	Chaotic Dynamical System	3
MOC2233	Engineering Mathematics II	3
MOC2234	Advanced Probability Theory	3
MOC2235	Statistical Inference	2
MOC2236	Introduction to Algebraic Geometry and Commutative Algebra	3
MOC2237	Linear Algebra	3
MOC2238	Introduction to Probability and Statistics	1
MOC2239	Descriptive Statistics with R Software	2
MOC2240	Engineering Mechanics - Statics and Dynamics	2
MOC2241	Experimental Stress Analysis	3
MOC2242	Robotics and Control : Theory and Practice	2
MOC2243	Computational Fluid Dynamics for Incompressible Flows	3
MOC2244	Experimental Methods in Fluid Mechanics	3
MOC2245	Foundations of Computational Materials Modelling	3
MOC2246	Acoustic Materials and Metamaterials	2
MOC2247	Power Plant Engineering	2
MOC2248	Applied Ergonomics	3
MOC2249	Product Design and Manufacturing	3
MOC2250	Manufacturing Process Technology I & II	3
MOC2251	Introduction To Mechanical Micro Machining	3
MOC2252	Non Traditional Abrasive Machining ProcessesUltrasonic, Abrasive Jet and Abrasive Water Jet Machining	1
MOC2253	Gear And Gear Unit Design : Theory And Practice	2
MOC2254	Conduction and Convection Heat Transfer	3
MOC2255	Laws of Thermodynamics	1
MOC2256	Kinematics of Mechanisms and Machines	2
MOC2257	Introduction To Fluid Mechanics	3
MOC2258	Fundamental of Welding Science and Technology	2
MOC2259	Introduction to Abrasive Machining and Finishing Processes	2
MOC2260	Automatic Control	2
MOC2261	Inspection and Quality Control in Manufacturing	1
MOC2262	Diffusion in Multicomponent Solids	3
MOC2263	Processing of Polymers and Polymer Composites	2
MOC2264	Operations Management	3
MOC2265	Convective Heat Transfer	1
MOC2266	Two phase flow and heat transfer	1

MOC2267	Steam and Gas Power Systems	2
MOC2268	Principles of Casting Technology	2
MOC2269	Financial Mathematics	3
MOC2270	Modelling and Simulation of Dynamic Systems	2
MOC2271	Fundamentals of combustion for propulsion	2
MOC2272	Industrial Automation And Control	3
MOC2273	Fundamentals of Nuclear Power Generation	3
MOC2274	Mechanics of Machining	2
MOC2275	IC Engines and Gas Turbines	3
MOC2276	Principles of Industrial Engineering	3
MOC2277	Computer Integrated Manufacturing	3
MOC2278	Machining Science	1
MOC2279	Introduction to Stochastic Processes	3
MOC2280	Introduction to System Dynamics Modeling	2
MOC2281	Management of New Products and Services	1
MOC2282	Integrated Marketing Management	2
MOC2283	Simulation of Business Systems: An Applied Approach	2
MOC2284	Production and Operation Management	3
MOC2285	Services Marketing : Integrating People, Technology, Strategy	2
MOC2286	Managerial Skills for Interpersonal Dynamics	3
MOC2287	Financial Institutions and Markets	3
MOC2288	Business Analytics For Management Decision	3
MOC2289	Services Marketing : A Practical Approach	1
MOC2290	Sales and Distribution Management	2
MOC2291	Principles of Human Resource Management	2
MOC2292	Managing change in organizations	2
MOC2293	Management of Inventory Systems	3
MOC2294	Quality Design And Control	3
MOC2295	Foundation Course in Managerial Economics	2
MOC2296	Engineering Econometrics	3
MOC2297	Financial Statement Analysis and Reporting	3
MOC2298	Business Statistics	3
MOC2299	Global Marketing Management	2
MOC2300	Marketing Research and Analysis - II	3
MOC2301	Infrastructure Planning and Managements	3
MOC2302	Modelling and Analytics for Supply Chain Management	3
MOC2303	Marketing Analytics	3
MOC2304	Financial Management For Managers	3
MOC2305	Management of Commercial Banking	3
MOC2306	Behavioral and Personal Finance	2
MOC2307	Total Quality Management - 1	2
MOC2308	Entrepreneurship	3
MOC2309	Modeling of Tundish Steelmaking Process in Continuous Casting	2

MOC2310	Fundamentals of Electronic Materials and Devices	2
MOC2311	Introduction to Materials Science and Engineering	3
MOC2312	Corrosion - Part I	2
MOC2313	Solar Photovoltaics: Principles, Technologies and Materials	2
MOC2314	Welding Processes	3
MOC2315	Theory and Practice of Non Destructive Testing	2
MOC2316	Steel Quality: Role of Secondary Refining and Continuous Casting	3
MOC2317	Materials Science and Engineering	2
MOC2318	Surface Engineering of Nanomaterials	2
MOC2319	Dealing with Materials Data: Collection, Analysis and Interpretation	3
MOC2320	Friction and Wear of Materials: Principle and Case Studies	2
MOC2321	Material Characterization	3
MOC2322	Offshore Structures Under Special Environmental Loads Including Fire Resistance	3
MOC2323	Physics of Biological Systems	3
MOC2324	Group Theory methods in Physics	3
MOC2325	Experimental Physics - II	3
MOC2326	Quantum Mechanics I	3
MOC2327	A Brief Course on Superconductivity	1
MOC2328	Fiber Optics	2
MOC2329	Electromagnetism	3
MOC2330	Experimental Physics III	3
MOC2331	Electronic Theory of Solids	3
MOC2332	Introduction to Atmospheric and Space Sciences	3
MOC2333	Optical Sensors	1
MOC2334	Evaluation of Textiles Materials	3
MOC2335	Advanced Textile Printing Technology	2
MOC2336	Textured Yarn Technology	3
MOC2337	Theory of Yarn Structure	3
MOC2338	Testing of Functional and Technical Textiles	2

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Dean Academics