

# INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

**NAME OF DEPARTMENT/CENTRE/SCHOOL:** Department of Humanities and Social Sciences

**Subject Code:** HSS-201

**Course Title:** Introduction to Sociology

**L-T-P:** 2-1-0

**Credits:** 3

**Subject Area:** HSSEC

**Course Outlines:** Evolution and pathways of sociology, Traditions of sociology, Classical theories in sociology, Functionalist vs conflict theories, Sociological methods, Ethnography, Human subjects and ethical problems in research, Social stratification and change, Caste system, Sanskritisation, Modernisation, Westernisation, Secularisation, Globalisation and the changing world, Nationality and globalisation, globalisation and inequality, globalisation and media, Mcdonaldisation, Social movements, Reform movements, Peasant and agrarian movements, tribal movements, Dalit movements, New social movements.

## INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

**NAME OF DEPARTMENT/CENTRE/SCHOOL:** Department of Humanities and Social Sciences

**Subject Code:** HSS-202

**Course Title:** Human Behavior at Work

**L-T-P:** 2-1-0

**Credits:** 3

**Subject Area:** HSSEC

**Course Outlines:** Definition, theoretical frameworks-cognitive, behavioristic, and social learning framework, Functions of manager-interpersonal, informational, and decisional functions; Personality, Personality frameworks-The Myers-Briggs Type Indicator, The Big Five Personality Model and the Dark Triad, Shaping behaviour-Schedules of reinforcement; Diversity in Organizations, Factors determining diversity in organizations, Levels of diversity-surface-level and deep-level diversity; Discrimination, Implementation of diversity management strategies; Organizational Change and Stress Management, Forces for change, Approaches to managing change, interventions, Stress management and Resilience at workplace; Organizational Justice, Ethics and Corporate Social Responsibility (CSR), the guiding principles of organizational ethics.

# INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

**NAME OF DEPARTMENT/CENTRE/SCHOOL:** Department of Humanities and Social Sciences

**Subject Code:** HSS-203

**Course Title:** Introduction to Economics

**L-T-P:** 2-1-0

**Credits:** 3

**Subject Area:** HSSEC

**Course Outlines:** Fundamental Economic Problems-Concepts of Scarcity, Choice, Opportunity Costs and Efficiency, Demand, Supply, Market Equilibrium, Consumer Behaviour, Production and Cost Analysis-Short-run and Long-run, Market outcomes Perfect Competition, Monopoly and Other Market Structures, Circular Flow of Income, National Income, Macroeconomic Challenges-Role of Fiscal and Monetary Policy, Capital Budgeting Process-Net Present Value (NPV), Internal Rate of Return (IRR), International Trade, Supply-and-Demand Analysis of Trade and Tariffs.

## INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

**NAME OF DEPARTMENT/CENTRE/SCHOOL:** Department of Humanities and Social Sciences

**Subject Code:** HSS-204

**Course Title:** Introduction to Abnormal Psychology

**L-T-P:** 3-0-0

**Credits:** 3

**Subject Area:** HSSEC

**Course Outlines:** Psychopathology: Perspectives, Current Paradigms, Diagnosis & Assessment: ICD-10, DSM- DSM-5-TR, Mood Disorders: Major Depressive Disorder, Bipolar Disorder, Suicide and Preventive Measures, Anxiety Disorders: Generalized Anxiety Disorder, Panic Disorder, Phobias, Social Anxiety Disorder, Trauma and Stressor Related Disorder, Obsessive Compulsive & Related Disorders, Personality Disorders: Cluster A, Cluster B and Cluster C, Schizophrenia: Positive, Negative and Disorganized Symptoms, Etiology, Risk factors, Substance-Related and Addictive Disorders: Depressants, Stimulants, Hallucinogens, Ecstasy & PCP, Gambling and Impulse-Control, Etiology, Treatment & Prevention.

## INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

**NAME OF DEPARTMENT/CENTRE/SCHOOL:** Department of Humanities and Social Sciences

**Subject Code:** HSS-205

**Course Title:** Introduction to Cognitive Science

**L-T-P:** 2-1-0

**Credits:** 3

**Subject Area:** HSSEC

**Course Outlines:** Cognitive Science, Behaviorism in Psychology, Theory of Computation, Algorithms and Turing Machines, Syntactic Structures, Information Processing Model, Interdisciplinary Perspective, Experimental Methods, Mind-Body Problem, Monism, Dualism, Functionalism, Free Will-Determinism, Mind, Consciousness, Multiple Drafts Theory, Modularity Assumption, Classical Theories of Vision, Theories of Attention, Memory, Modal Model, ACT\* Model, Working Memory Model, Visual Imagery, Image Structures and Processes, Problem Solving, The SOAR Model, Language Acquisition, Philosophy and Linguistics, Cognition and Linguistics, Neuroscience and Linguistics, Artificial Intelligence and Linguistics, Speech Recognition, Artificial Intelligence, Designing Intelligent Agents, Machine Reasoning, Logical and Inductive Reasoning, Expert Systems, Fuzzy Logic, Robotics, Biological and Behavioral, Foundations of Robotic Paradigms, Robotic Paradigms, Reactive, Hybrid Deliberative/Reactive.

## INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

**NAME OF DEPARTMENT/CENTRE/SCHOOL:** Department of Humanities and Social Sciences

**Subject Code:** HSS-206

**Course Title:** Introduction to Social Psychology

**L-T-P:** 2-1-0

**Credits:** 3

**Subject Area:** HSSEC

**Course Outlines:** Social psychological approaches to thinking about people; Implicit and explicit theories; Automatic & Controlled processing of thought - Schema, Priming, and mental framework of organizing information; Heuristics: availability, anchoring & adjustment; Biases; Group and its characteristics, Coordination and Cooperation in groups; Conformity and group Influence; Compliance and Obedience; Self-Categorization Theory; Social Role Theory; Attitude and Cognitive dissonance; Persuasion and theories of attitude change; Theories of Emotion, Emotional competence, emotional intelligence, Neurological bases of emotion. Need to belong, Interdependence theory, Attachment theory; Romantic relationship and Marriage; Love, Jealousy and Infidelity.