

## FACULTY OF ENGINEERING &amp; TECHNOLOGY

|   |  |    |                  |    |       |                                     |                                       |           |       |
|---|--|----|------------------|----|-------|-------------------------------------|---------------------------------------|-----------|-------|
| Programme   | Bachelor of Technology   |    |                  |    |       | Branch/Spec.                        | Computer Science and Business Systems |           |       |
| Semester  | V  |    |                  |    |       | Version                             | 1.0.0.0                               |           |       |
| Effective from Academic Year  |  |    | 2023-24          |    |       | Effective for the Batch admitted in |                                       | July 2021 |       |
| Course Code   | 2CSBSPE5104  |    | Course Name      |    |       | Behavioural Economics               |                                       |           |       |
| Teaching Scheme   |  |    |                  |    |       | Examination Scheme (Marks)          |                                       |           |       |
| (Per week)  | Lecture (DT)   |    | Practical (Lab.) |    | Total |                                     | CE                                    | SEE       | Total |
|   | L  | TU | P                | TW |       |                                     |                                       |           |       |
| Credit  | 3  | 0  | 1                | -  | 4     | Theory                              | 40                                    | 60        | 100   |
| Hours   | 3  | 0  | 2                | -  | 5     | Practical                           | 30                                    | 20        | 50    |
| Pre-requisites  |  |    |                  |    |       |                                     |                                       |           |       |
| Fundamentals of Economics   |  |    |                  |    |       |                                     |                                       |           |       |
| Course Outcomes   |  |    |                  |    |       |                                     |                                       |           |       |
| On successful completion of the course, the students will be able to: |  |    |                  |    |       |                                     |                                       |           |       |
| CO1   | explain the fundamental knowledge of economics and behavioural economics.  |    |                  |    |       |                                     |                                       |           |       |
| CO2   | analyze the concept, preference and able to assess the risk  |    |                  |    |       |                                     |                                       |           |       |
| CO3   | compile and assess the intertemporal choice in Economics.  |    |                  |    |       |                                     |                                       |           |       |
| CO4   | develop individual decision making of economic actors  |    |                  |    |       |                                     |                                       |           |       |
| Theory Syllabus   |  |    |                  |    |       |                                     |                                       |           |       |
| Unit  | Content  |    |                  |    |       |                                     |                                       |           | Hrs.  |
| 1   | <b>Introduction</b><br>The neoclassical/standard model and behavioral economics in contrast; historical background; behavioral economics and other social sciences; theory and evidence in the social sciences and in behavioral economics; applications – gains and losses, money illusion, charitable donation.  |    |                  |    |       |                                     |                                       |           | 07    |
| 2   | <b>Basics of choice theory</b><br>Revisiting the neoclassical model; utility in economics and psychology; models of rationality; connections with evolutionary biology and cognitive neuroscience; policy analysis – consumption and addiction, environmental protection, retail therapy; applications – pricing, valuation, public goods, choice anomalies  |    |                  |    |       |                                     |                                       |           | 07    |
| 3   | <b>Beliefs, heuristics and biases:</b> Revisiting rationality; causal aspects of irrationality; different kinds of biases and beliefs; self-evaluation and self-projection; inconsistent and biased beliefs; probability estimation; trading applications – trade in counterfeit goods, financial trading behavior, trade in memorabilia   |    |                  |    |       |                                     |                                       |           | 07    |
| 4   | <b>Choice under uncertainty:</b> Background and expected utility theory; prospect theory and other theories; reference points; loss aversion; marginal utility; decision and probability weighting; applications – ownership and trade, income and consumption, performance in sports.   |    |                  |    |       |                                     |                                       |           | 07    |
| 5   | <b>Intertemporal choice:</b> Geometric discounting; preferences over time; anomalies of inter-temporal decisions; hyperbolic discounting; instantaneous utility; alternative concepts – future projection, mental accounts, heterogeneous selves, procedural choice; policy analysis – mobile calls, credit cards, organization of government; applications – consumption and savings, clubs and membership, consumption planning  |    |                  |    |       |                                     |                                       |           | 08    |
| 6   | <b>Strategic choice:</b> Review of game theory and Nash equilibrium – strategies, information, equilibrium in pure and mixed strategies, iterated games, bargaining, signaling, learning; applications – competitive sports, bargaining and negotiation, monopoly and market entry<br>Individual preferences; choice anomalies and inconsistencies; social preferences; altruism; fairness; reciprocity; trust; learning; communication; intention; demographic and cultural aspects; social norms; compliance and punishment; inequity aversion; policy analysis – norms and markets, labor markets, market clearing, public goods; applications – logic and knowledge, voluntary contribution, compensation design |    |                  |    |       |                                     |                                       |           | 09    |

|                     |   |
|---------------------|---|
| Practical Content   |   |
| NIL                 |   |
| Text Books          |   |
| 1                   | An Introduction to Behavioral Economics by N. Wilkinson and M. Klaes  |
| Reference Books     |   |
| 1                   | An introduction to behavioural economics by Wilkinson and Klaes, Palgrave McMillan  |
| ICT/MOOCs Reference |   |
| 1                   | <a href="https://nptel.ac.in/courses/110105144">https://nptel.ac.in/courses/110105144</a>                                 |
| 2                   | <a href="https://in.coursera.org/learn/duke-behavioral-finance">https://in.coursera.org/learn/duke-behavioral-finance</a> |

| Mapping of CO with PO and PSO: |             |             |             |             |             |             |             |             |             |              |              |              |                  |                  |                  |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|------------------|------------------|------------------|
|                                | P<br>O<br>1 | P<br>O<br>2 | P<br>O<br>3 | P<br>O<br>4 | P<br>O<br>5 | P<br>O<br>6 | P<br>O<br>7 | P<br>O<br>8 | P<br>O<br>9 | P<br>O<br>10 | P<br>O<br>11 | P<br>O<br>12 | P<br>S<br>O<br>1 | P<br>S<br>O<br>2 | P<br>S<br>O<br>3 |
| CO1                            | 2           | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 2           | 2            | 2            | 2            | 1                | 1                | 1                |
| CO2                            | 2           | 2           | 1           | 2           | 2           | 2           | 2           | 2           | 1           | 1            | 2            | 2            | 1                | 1                | 2                |
| CO3                            | 1           | 2           | 3           | 3           | 3           | 3           | 2           | 3           | 2           | 2            | 2            | 2            | 1                | 1                | 2                |
| CO4                            | 2           | 1           | 1           | 1           | 1           | 1           | 2           | 1           | 2           | 2            | 2            | 2            | 1                | 1                | 2                |