**17CE4101 – DESIGN AND DRAWING OF IRRIGATION STRUCTURES**

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| **Course Category** | Professional Core | **Credits** | 4 |
| **Course Type** | Theory | **Lecture - Tutorial - Practical** | 3 - 2 - 0 |
| **Prerequisite** | Hydrology &  Advanced Hydraulics | **Sessional Evaluation** | 40 |
| **Semester End Exam Evaluation** | 60 |
| **Total Marks** | 100 |

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| **Course Objectives** | 1. To understand the elements of surplus wire and their importance in irrigation engineering. 2. To understand the elements of tank sluice with tower head, and their importance in irrigation engineering. 3. To understand the elements of canal drop and their importance in irrigation engineering. 4. To understand the elements of canal regulator and their importance in irrigation engineering. 5. To understand the elements of syphon well drop and their importance in irrigation engineering. 6. To understand the elements of syphon aqueduct and their importance in irrigation engineering. | |
| **Course Outcomes** | CO1 | Design and draw the components, sections of surplus weir. |
| CO2 | Design and draw the components, sections of tank sluice with tower head. |
| CO3 | Design and draw the components, sections of canal drop. |
| CO4 | Design and draw the components, sections of canal regulator. |
| CO5 | Design and draw the components, sections of syphon well drop. |
| CO6 | Design and draw the components, sections of syphon aqueduct. |
| **Course**  **Content** | **Design and Drawing of**   1. Surplus weir 2. Tank sluice with a tower head 3. Canal drop-notch type 4. Canal regulator 5. Syphon well drop 6. Syphon Aqueduct ( Type – II)   (Under tunnel) | |
| **Textbooks**  **and References** | **TEXTBOOKS:**   1. “Water Resources Engineering Principles and Practice” by C.S. Murthy. 2. “Irrigation Engineering Structures” by Elhis. 3. “Irrigation Engineering and Hydraulic Structures” by Sharma R.K. | |