THE Impact Ranking 2021

SDG Curriculum Mapping

Course Title: Algorithms Lab

Course Code: CSE 306

Faculty Name: Satyaki Das

**Learning Objectives mapping with SDG:**

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| Learning Objectives | Statement of the learning components | SDG Mapping | | |
| Goal | Target | Indicator |
| To emphasize on efficient algorithm designing, solving practical problems through algorithmic techniques and data structures to be used in the implementations of algorithms. | SDG 4,  SDG 9 |  |  |
| To expose the students to a variety of techniques that have practical applications, while conducting detailed analysis of the requirements required by the algorithms. | SDG 4,  SDG 9 |  |  |
| Content | Insertion Sort, Growth of Functions | SDG 4,  SDG 9 |  |  |
| Divide-and-Conquer: Merge Sort and Quick Sort | SDG 4,  SDG 9 |  |  |
| Greedy Algorithm | SDG 4,  SDG 9 |  |  |
| Dynamic Programming | SDG 4,  SDG 9 |  |  |
| Graph Algorithms | SDG 4,  SDG 9 |  |  |
| Learning Activities | 1. Lectures, group discussion, studying published literature along with textbooks | SDG 4,  SDG 9 |  |  |
| 2. As a group project, students prepare develop a software that uses and advanced algorithm to solve a problem | SDG 4,  SDG 9,  SDG 17 |  |  |