|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S.No | Academic Year / SEM | Course Code and Name | Name of the faculty | Type of learning  (experiential learning, participative learning and problem-solving methodologies ) | Number of students benefitted | Nature of Content  (Factual/Conceptual/ Procedural) | Short Description | Outcome of the particular learning and results obtained | Type of Valid Proof  (Sample Document /Softcopy/ Images) |
| 1. | 2021-22 (EVEN) | noc22\_ce22& Air pollution and control | - | Participative learning | 6 | Conceptual  <https://onlinecourses.nptel.ac.in/noc22_ce22/preview> | Students gain the knowledge and understanding of causes and effects of air pollution and their controlling mechanisms | Knows Emerging technologies and strategies to mitigate air pollution and Current challenges | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |
| 2. | 2021-22 (EVEN) | noc22&Advanced Graph Theory | - | Participative learning | 1 | Procedural  <https://onlinecourses.nptel.ac.in/noc21_cs48/preview> | Focuses on problem solving using graph theory with concepts on the applications in the field of computer science | students will have  knowledge about how the graph theory play an important role to solve the technology driven and research oriented problems. | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |
| 3. | 2021-22 (EVEN) | noc22\_cs42& An Introduction to Programming through C++ | - | Participative learning | 23 | Conceptual  <https://onlinecourses.nptel.ac.in/noc21_cs38/preview> | Students have the basic knowledge about C++ language | Strategies for translating manual strategies to computer programs. | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |
| 4. | 2021-22 (EVEN) | noc22\_cs44  &Blockchain and its Applications | - | Participative learning | 1 | Procedural  <https://onlinecourses.nptel.ac.in/noc22_cs44/preview> | provides a transparent, secured, tamper-proof solution for interconnecting different stakeholders | Students know basic design principles of Blockchain technology and its applications over different sectors | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |
| 5. | 2021-22 (EVEN) | noc22\_cs20  &Cloud Computing | - | Participative learning | 49 | Procedural  <https://onlinecourses.nptel.ac.in/noc21_cs14/preview> | This course will introduce various aspects of cloud computing, including fundamentals, management issues, security challenges and future research trends. | This will help students to use and explore the cloud computing platforms. | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |
| 6. | 2021-22 (EVEN) | noc22\_cs08  &Data Analytics with Python | - | Participative learning | 76 | Procedural  <https://onlinecourses.nptel.ac.in/noc21_cs45/preview> | This course provides Introduction to data analytics and Python fundamentals | Students get hands-on experience creating analytics models | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |
| 7. | 2021-22 (EVEN) | noc22\_cs28  & Data Science for Engineers | - | Participative learning | 1 | Procedural  <https://onlinecourses.nptel.ac.in/noc21_cs69/preview> | Introduces R as a programming language and  mathematical foundations required for data science | Students Develop R codes for data science solutions and Correlate results to the solution | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |
| 8. | 2021-22 (EVEN) | noc22\_cs13  & Ethical Hacking | - | Participative learning | 1 | Conceptual  <https://onlinecourses.nptel.ac.in/noc22_cs13/preview> | Covers  basic topics like networking, network security and cryptography | Students have a hands-on demonstrations for the experiments explained | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |
| 9. | 2021-22 (EVEN) | noc22\_bt24  &Forests and their Management | - | Participative learning | 1 | Conceptual  <https://onlinecourses.nptel.ac.in/noc20_bt01/preview> | Gives the  principles of forestry and silviculture. | Students use case studies and examples from India and abroad to understand how forests are  managed in ecological values derived from forests. | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |
| 10. | 2021-22 (EVEN) | noc22\_cs03  &Foundations of Cryptography | - | Participative learning | 1 | Conceptual  <https://onlinecourses.nptel.ac.in/noc22_cs03/preview> | The course provides the basic paradigm and principles of modern cryptography. | the students are able to understand a significant portion of current cryptography research papers and standards. | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |
| 11. | 2021-22 (EVEN) | noc22\_cs54  & Introduction to soft computing | - | Participative learning | 4 | Conceptual  <https://onlinecourses.nptel.ac.in/noc22_cs54/preview> | It is a solution to a complex problem in real time, easy to adapt with changed scenario and can be implemented with parallel computing. | Students gain knowledge in many application areas such as medical diagnosis, computer vision, hand written character recondition | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |
| 12. | 2021-22 (EVEN) | noc22\_cs37  & Online Privacy | - | Participative learning | 6 | Conceptual  <https://onlinecourses.nptel.ac.in/noc22_cs37/preview> | Helps in understanding the threats and defend privacy through real-time and scalable systems | Students understand Various Privacy breaches, and its effects and mitigation ways | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |
| 13. | 2021-22 (EVEN) | noc22\_cs26  & Programming, Data Structures and Algorithms using Python | - | Participative learning | 1 | Procedural  <https://onlinecourses.nptel.ac.in/noc22_cs26/preview> | Basic concepts such as conditionals, loops, functions, lists, strings and tuples.  It goes on to cover searching and sorting algorithms, dynamic programming and backtracking, as well as topics such as exception handling and using files. | The course covers Python dictionaries as well as classes and objects for defining user defined datatypes such as linked lists and binary search trees. | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |
| 14. | 2021-22 (EVEN) | noc22\_cs30  & Social Networks | - | Participative learning | 38 | Conceptual  <https://onlinecourses.nptel.ac.in/noc20_cs78/preview> | It encompasses surprising secrets which have been time and again revealed with the help of tools like graph theory, sociology, game theory etc | Students gain a knowledge on the graphs and revelation of their properties with these tools have been termed as Social Network Analysis. | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |
| 15. | 2021-22 (EVEN) | noc22\_de01  & Understanding Design | - | Participative learning | 2 | Conceptual  <https://onlinecourses.nptel.ac.in/noc20_de01/preview> | It introduces to the field of design and its relationship with other disciplines | Students understands of the discipline of design. | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |
| 16. | 2021-22 (EVEN) | noc22\_de08  & Understanding Incubation and Entrepreneurship | - | Participative learning | 6 | Conceptual  <https://onlinecourses.nptel.ac.in/noc22_de08/preview> | It helps the eclectic mix of guidance from expert professors and entrepreneur stories collectively foster the critical skills needed to build your own startup | Students learn to form their problem statement, build teams, understand the rigorous customer discovery process and finally learn to use the Lean Canvas Model. | <https://drive.google.com/drive/folders/1jYx8BkCYOeyeTSHb_QqzSr8Aph4FQ-JJ> |