

**ACADEMIC AFFAIRS OFFICE  
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

No. Acd./5446 /IAPC-136

Dated: January 09, 2024

**Head, Mehta Family School of Data Science and Artificial Intelligence**

The IAPC in its 136<sup>th</sup> meeting held on 22.12.2023 vide Item No. 136.3.2 has approved the course outlines of 'DA-206: Programming for DS and AI' of B.Tech. in Data Science and Artificial Intelligence of old UG curriculum by Mehta Family School of Data Science and Artificial Intelligence:

The approved course outlines are attached as **Appendix-A**.

  
**Assistant Registrar  
(Curriculum)**

Encl. Appendix-A

**Copy to (through e mail):-**

1. All faculty
2. Chairperson, ScAPC of Mehta Family School of Data Science and Artificial Intelligence
3. Dean, Academic Affairs
4. Associate Dean of Academic Affairs (Curriculum)
5. Deputy Registrar, Academic Affairs Office
6. Channel i/ AIS (acad.iitr.ac.in)/ Academic webpage of iitr.ac.in

## **INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

**NAME OF SCHOOL:** Mehta Family School of Data Science and Artificial Intelligence

**Subject Code:** DA-206

**Course Title:** Programming for DS and AI

**L-T-P:** 3-1-0

**Credits:** 4

**Subject Area:** PCC

**Course Outline:** Introduction to Python and Computer Programming; Data Structures; Control Structures and Loops, Functions and Regular Expressions; File Handling; Useful Third Party Libraries – Numpy, Scipy, Pandas, Matplotlib and Seaborn. Use cases of AI: Supervised and Unsupervised learning paradigm.