MIT-WPU
॥ विश्वशान्तिर्धुवं धुवा ॥

MIT WORLD PEACE UNIVERSITY

SHRI SAINT JNANESHWARA WORLD PEACE LIBRARY

2024 - 25

B.Sc. Data Science & Big Data Analytics

Programme Structure

mitwpu.edu.in

Division	Faculty of Engineering and Technology
School Name	School of Computer Science & Engineering
Department Name	Department of Computer Science and Applications
Program Name	B.Sc. Data Science & Big Data Analytics

Course Basket

Course Type	Description
Programme Core	Courses dealing with foundations, depth and breadth of the major in which a student is admitted at MIT-WPU
Programme Electives	Open electives under the Programme allow students to specialise in a particular area connected to their major.
University Core	Courses that reflect the core MITWPU values and the mission of Life Transformation of students.
University Electives	Multidisciplinary courses across the faculties at MIT-WPU and outside the Programme core.

Summary for Four Years Together

Course Type	Description
Program Foundation	34
Program Major	48
Program Electives	16
Program Capstone Project/Problem-Based Learning/ Seminar and Internships	32
University Core	24
University Electives	9
TOTAL	**163**

Semester	Odd(I)	Even(II)	Total Credits
First Year	22	22	44
Second Year	22	23	45
Third Year	20	19	39
Fourth Year	16	19	35

Semester	Course Type	Course Name / Course Title	Total Credits
I	University Core	Effective Communication	1
I	University Core	Critical Thinking	1
I	University Core	Environment and Sustainability	1
I	University Core	Foundations of Peace	2
I	University Core	Yoga - I	1
I	University Core	SLDP	1
I	Programme Foundation	Computer Organisation	3
I	Programme Foundation	Database Management System	4
I	Programme Foundation	C Programmeming	5
I	Programme Foundation	Introduction to Data Science	3
		Total	**22**

Semester	Course Type	Course Name / Course Title	Total Credits
II	University Core	Advanced Excel	1
II	University Core	Financial Literacy	1
II	University Core	Yoga - II	1
II	University Core	Co-creation	1
II	University Core	Indian Constituion	1
II	University Core	IKS(General)	2
II	University Core	Sports	1
II	Programme Foundation	Discrete Mathematics	3
II	Programme Foundation	Data Structure Using C	4
II	Programme Foundation	Introduction to Cloud Computing	3
II	Programme Major	Introdcution to Statistical Analytics using Excel	4
		Total	**22**

Semester	Course Type	Course Name / Course Title	Total Credits
III	University Core	Research Innovation Design Entrepreneurship (RIDE)	1
III	University Core	Spiritual & Cultural Heritage; Indian Experience	2
III	University Electives	UE - I	3
III	University Electives	UE-II	3
III	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Project Based Learning - I	1
III	Programme Foundation	Core Java	4
III	Programme Major	Python Programmeming	4
III	Programme Major	Data Mining and Data warehousing	4
		Total	**22**

Semester	Course Type	Course Name / Course Title	Total Credits
IV	University Electives	UE-III	3
IV	University Core	Rural Immersion	1
IV	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Project Based Learning - II	1
IV	University Core	Life Transformation Skills	1
IV	Programme Foundation	Linear Algebra and Calculus	3
IV	Programme Foundation	IKS - 2	2
IV	Programme Major	Big Data Technologies using Hadoop	4
IV	Programme Major	SPSS Programmeming	3
IV	Programme Major	Stastistical Inference and Multivariate Analysis	3
IV	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Lab on SPSS	2
		Total	**23**

Semester	Course Type	Course Name / Course Title	Total Credits
V	University Core	Managing Conflicts Peacefully: Tools and Techniques	2
V	Programme Capstone Project/ Problem Based Learning/ Seminar and Internships	Project Based Learning - III	1
V	Programme Major	R Programmeming	4
V	Programme Major	Introduction to Machine Learning - I	4
V	Programme Major	MOOC	2
V	Programme Capstone Project/ Problem Based Learning/ Seminar and Internships	Research Paper Writing	1
V	Programme Capstone Project/ Problem Based Learning/ Seminar and Internships	Data Analytics using python	2
V	Programme Electives		4
		Total	**20**

Semester	Course Type	Course Name / Course Title	Total Credits
VI	Programme Capstone Project/ Problem Based Learning/ Seminar and Internships	Project Based Learning - IV	1
VI	University Core	National Academic Immersion	2
VI	Programme Major	No SQL	4
VI	Programme Major	Introduction to Machine Learning -II	4
VI	Programme Capstone Project/ Problem Based Learning/ Seminar and Internships	Mini Project - I	4
VI	Programme Electives		4
		Total	**19**

Semester	Course Type	Course Name / Course Title	Total Credits
VII	Programme Major	Enterprernship Development	3
VII	Programme Major	Data Visualization	5
VII	Programme Electives		4
VII	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Mini Project - II	4
		Total	**16**

VIII	Programme Electives		4
VIII	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Full Time Industry Internship	15
		Total	**19**

List of Programme Electives

Semester	Course Type	Course Name / Course Title	Course Type
V	Programme Elective - I	Web Technology using HTML	4
V	Programme Elective - I	Business Analytics	4
V	Programme Elective - I	Software Engineering	4
VI	Programme Elective - II	Internet Technology using WordPress	4
VI	Programme Elective - II	Health Analytics	4
VI	Programme Elective - II	Agile Framework	4
VII	Programme Elective - III	Internet Programmeming using PHP	4
VII	Programme Elective - III	Big data analytics	4
VII	Programme Elective - III	Automation Testing	4
VIII	Programme Elective - IV	Web Security	4
VIII	Programme Elective - IV	Data Visualization	4
VIII	Programme Elective - IV	DevOps	4

*Modifications to the programmes and courses are contingent upon adherence to university guidelines and procedures. Any proposed changes must undergo a thorough review process, including consultation with relevant academic departments, approval from the appropriate administrative bodies, and compliance with accreditation standards.

Additionally, consideration will be given to feedback from students, faculty, and other stakeholders to ensure that modifications align with the overall educational objectives and mission of the university. The implementation of any approved changes will be communicated transparently to the university community, and appropriate measures will be taken to facilitate a smooth transition for all affected parties.