



MCKV INSTITUTE OF ENGINEERING

NAAC Accredited "A" Grade Autonomous Institute under UGC Act 1956
Approved by AICTE & affiliated to MaulanaAbulKalam Azad University of Technology, West Bengal
243 G.T. Road (N), Liluah, Howrah- 711204, West Bengal, India
Ph: +91 33 26549315/17 Fax +91 33 26549318 Web: www.mckvie.edu.in/

Curriculum for Undergraduate Degree (B.Voc.) in Software Development(w.e.f. AY: 2022-23)

Part I: Course Introduction, Definition

A. Introduction:

All India Council for Technical Education (AICTE) and Ministry of HRD, Government of India has introduced entrepreneurship oriented Skill development course B.Voc (Bachelor of Vocational Study). These courses will be run by AICTE approved institutes by using available infrastructure and facilities. B.Voc is a 3 years bachelor degree course. According to AICTE guidelines the degree is mentioned as a level 7 in NSQF, which means NSQF levels 5, 6, 7 to be converted in the 3 years of study. This implies level 5 to be converted in 1st year, level 6 to be converted in 2nd year and level 7 to be converted in 3rd year. The minimum eligibility criteria are 10+2 in Science/Arts/Commerce or 3 years' diploma after class X. In this course multiple entry and exit scheme is introduced. If a student successfully completed the 1st year of the course and exit from the course, then he/she will receive a Diploma. If a student successfully completed both the 1st year and the 2nd year of the course and exit from the course, then he/she will receive an Advanced Diploma. After completion of all the 3 years successfully a student will be awarded with the B. Voc. Degree in Software Development.

B. Definition of Credit:

Sl. No.	Description	Credit
1	1 Hr. Lecture (L) Per Week	1.0
2	1 Hr. Practical/ Lab (P) Per Week	0.5
3	On Job Training (OJT)/ Qualification Pack	15

Range of Credits:

According to AICTE guideline, a student has to cover total 180 credits in 3 years (i.e. 30 credits in each semester). On Job Training (OJT) is mandatory for all students in each semester and which is of 15 credits.

C. Category wise credit Distribution:

Sl. No.	Category	Credit Allotted	Credit as AICTE
1	Humanities, Social Science and Management courses	9	0
2	Vocational courses theory and practical	81	90
3	On Job Training (OJT)/Industrial Training/Internship	90	90
Total		180	

D. Code and Definition

Sl. No.	Code	Definitions
1	L	Lecture
2	T	Tutorial
3	P	Practical
4	OJT	On Job Training



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5	BSD	Bachelor (B. Voc.) in Software Development
6	HM	Humanities, Social science and Management
7	VOC	Vocational

E. Courses in different category:

Humanities, Social Science and Management courses							
Sl No.	Semester	Course Code	Course Name	Contact Hours			Credits
				L	T	P	
Theory							
1	I	BSD101	Effective English Skills	3	0	0	3
2	II	BSD201	Introduction to Accounting	3	0	0	3
3	VI	BSD601	Professional Ethics	3	0	0	3
<i>Total Theory</i>				9	0	0	9
Practical/ Training							
1	II	BSD291	Financial Accounting Lab	0	0	3	1.5
<i>Total Practical/ Training</i>				0	0	3	1.5
Total				9	0	3	10.5

Vocational courses							
Sl No.	Semester	Course Code	Course Name	Contact Hours			Credits
				L	T	P	
Theory							
1	I	BSD102	Computer Fundamentals and C Programming	3	0	0	3
2	I	BSD103	Web Designing	3	0	0	3
3	I	BSD104	Operating System	3	0	0	3
4	II	BSD202	Data and File Structure	3	0	0	3
5	II	BSD203	Software Engineering	3	0	0	3
6	II	BSD204	Data Visualization	3	0	0	3
7	III	BSD301	Object Oriented Technology with Java	3	0	0	3
8	III	BSD302	Management Information System	3	0	0	3
9	III	BSD303	Linux Operating System – Operations and Management	3	0	0	3
10	III	BSD304	Cyber Security	3	0	0	3
11	IV	BSD401	Data Base Management System	3	0	0	3
12	IV	BSD402	Introduction to Android	3	0	0	3
13	IV	BSD403	Internet Technology	3	0	0	3
14	IV	BSD404	ERP in Business and Corporate	3	0	0	3
15	V	BSD501	Multimedia Technology	3	0	0	3
16	V	BSD502	Introduction to Python Programming	3	0	0	3
17	V	BSD503	Introduction to Biometrics	3	0	0	3



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18	V	BSD504	Network Security and Cryptography	3	0	0	3
19	VI	BSD601	Professional Ethics	3	0	0	3
20	VI	BSD602	Introduction to Machine Learning	3	0	0	3
21	VI	BSD603	Computer Network and System Administration	3	0	0	3
4	50	BSD604	E-Commerce	3	0	0	3
<i>Total Theory</i>				63	0	0	63
Practical							
1	I	BSD192	C Programming and Office Tools Lab	0	0	3	1.5
2	I	BSD193	Web Designing Lab	0	0	3	1.5
3	II	BSD291	Accounting lab	0	0	3	1.5
3	II	BSD292	Data and File Structure Lab	0	0	3	1.5
4	III	BSD391	Java Programming Lab	0	0	3	1.5
5	III	BSD395	PC Assembling and Maintenance Lab	0	0	3	1.5
6	IV	BSD491	Data Base Management System Lab	0	0	3	1.5
7	IV	BSD492	Android Application Development Lab	0	0	3	1.5
8	V	BSD591	Multimedia Lab	0	0	3	1.5
9	V	BSD592	Python Programming Lab	0	0	3	1.5
10	VI	BSD692	Machine Learning Lab	0	0	3	1.5
11	VI	BSD695	System Administration and Network Lab	0	0	3	1.5
<i>Total Practical/ Training</i>				0	0	36	16.5
Total				63	0	36	79.5

On Job Training (Sessional)/Industrial Training/Internship							
Sl No.	Semester	Course Code	Course Name	Contact Hours			Credits
				L	T	P	
1	I	BSD181	On Job Training/Qualification Pack	0	0	0	15
2	II	BSD281	On Job Training/Qualification Pack	0	0	0	15
3	III	BSD381	On Job Training/Qualification Pack	0	0	0	15
4	IV	BSD381	On Job Training/Qualification Pack	0	0	0	15
5	V	BSD581	On Job Training/Qualification Pack	0	0	0	15
6	VI	BSD681	On Job Training/Qualification Pack	0	0	0	15
Total Credit				0	0	0	90