

SYLLABUS

B.Voc

in

BUSINESS PROCESS AND DATA ANALYTICS

**(Prepared as per Outcome Based Education
Framework to be effective from 2020 admission)**

DDU KAUSHAL KENDRA

**COCHIN UNIVERSITY OF SCIENCE AND
TECHNOLOGY**

DDU KAUSHAL KENDRA

Vision

“Empowering Youth for a Skilled and Sustainable Nation”

Mission

- M1.** Offer quality education in emerging vocational domains in technology and management
- M2.** Impart skills education to develop industry-ready, employable professionals.
- M3.** Promote entrepreneurial orientation and skills among the students
- M4.** Inculcate innovation mind-set in students to excel in the emerging dynamic, global economy.
- M5.** Foster social commitment and sustainable business philosophy in students

Program Description

B.Voc. in Business Process and Data Analytics course is a Bachelors level vocational programme conforming to National Skill Qualification Framework (NSQF). Flexible course exit with certification is provided at Diploma, Advanced Diploma and Degree levels corresponding progressive job roles in the domains of Business Process and Data analytics. Course curriculum is aligned with the norms of the concerned Sector Skill Councils (SSC) for enabling the students to obtain skill certifications from the SSC concerned at various exit points.

The programme syllabus provides a balanced course coverage in the domains of management, business process, data analytics, predictive modelling and quantitative methods of management. The programme blends vocational skill development in these areas with interdisciplinary knowledge of computing, statistics and social science to mould industry ready graduates. Introduction to modern computing and data analytics methods provides the graduates of this programme with a sound base for adapting to innovations in business environment.

Programme Educational Objectives

Graduates of the B.Voc. program are expected to attain or achieve the following Program Educational Objectives within a few years of graduation:

PEO 1: Identify and describe complex business problems in terms of analytical models and find solutions that achieve stated objectives.

PEO 2: Interact effectively and professionally across all levels and functions of businesses in a customer-centric, socially responsible and ethical manner.

PEO 3: Develop new and improved innovative business processes after gap analysis through process redesign that supports organizational strategic objectives.

PEO 4: Identify lifelong learning opportunities to enhance knowledge base and vocational skills that contribute to the professional advancement and societal betterment.

PEO 5: Deliver projects in a timely manner using project management tools and techniques respecting the diversity of the team and exhibiting leadership skills where necessary.

Programme Articulation matrix

	M1	M2	M3	M4	M5
PEO1	2	3		1	2
PEO2	3	2	3		2
PEO3	2	3		3	
PEO4		3	3	2	2
PEO 5	3	3	3	2	

Programme Learning Outcomes

Students in the B.Voc program are expected to attain the following programme learning outcomes by the time they graduate the course.

PLO1: Apply quantitative modelling and data analysis techniques to the solution of real-world business problems, communicate findings, and effectively present results using data visualization techniques.

PLO2: Analyse the key business processes that drive the value chain of an organization using principles of business process management, Big Data Analytical Techniques and data mining methodologies.

PLO3: Identify and develop models using appropriate data analysis software for business decision making.

PLO4: Use research-based knowledge and methods to conduct investigations on complex problems and provide valid conclusions.

PLO5: Create solutions by utilising modern software tools and enhance organizational effectiveness.

PLO6: Apply ethical practices in everyday business activities and make well-reasoned ethical business process and data management decisions.

PLO7: Effectively communicate technical and non-technical information through oral, written and digital forms in an organizational environment.

Mapping of PLOs with PEOs

	PEO 1	PEO 2	PEO 3	PEO 4	PEO 5
Domain Knowledge	*	*			
Problem Analysis	*	*	*		*
Design/Development of solutions	*	*	*		*
Conduct investigations	*		*		
Modern tool usage	*		*	*	*
Societal & Ethical outlook		*			
Individual/Teamwork and communication		*			*

Programme Structure

SEMESTER I

Sl. No	Course No.	Name of the Course	Hours			Marks		Credit
			L	T	P	Internal	End semester	
1	KBD 1101	English Language Skills	4	1	0	50	50	4
2	KBD 1102	Principles of Management and Organizations	5	0	0	50	50	5
3	KBD 1103	Statistics for Business	5	2	0	50	50	5
4	KBD 1104	Functional Management for Business	5	1	0	50	50	5
5	KBD 1105	Programming Languages for Data Analytics	2	0	6	50	50	5
6	KBD 1106	Business Environment Analysis	4	1	0	50	50	4
7	KBD 1107	Workshop on Business communication skills (5 Days)					50	2
		Total				300	350	30

SEMESTER II

Sl. No.	Course No.	Name of the Course	Hours			Marks		Credit
			L	T	P	Internal	End semester	
1	KBD 1201	Strategic Communication for Workplaces	5	2	0	50	50	5
2	KBD 1202	Information Systems for Business	4	0	2	50	50	5
3	KBD 1203	Operations Research	6	2	0	50	50	6
4	KBD 1204	Fundamentals of Business Process Management	4	1	2	50	50	5
5	KBD 1205	Database Fundamentals	3	0	4	50	50	5
6	KBD 1206	Project I -Organisation Study- 15 working days. (50 marks for continuous assessment and 50 for written report after completion of the project)					100	4
Total						250	350	30

SEMESTER III

Sl. No.	Course No.	Name of the Course	Hours			Marks		Credit
			L	T	P	Internal	End semester	
1	KBD 1301	Managerial Skill Development & Design Thinking	3	2	4	50	50	5
2	KBD 1302	Financial Accounting	5	0	0	50	50	5
3	KBD 1303	Business Ethics and Cyber law	4	0	0	50	50	4
4	KBD 1304	Production and Operations Management	4	1	0	50	50	4
5	KBD 1305	Data Visualization for Analytics	2	0	6	50	50	5
6	KBD 1306	Data Mining Techniques	2	0	6	50	50	5
7	KBD 1307	Workshop on Personal Productivity Improvement (5 Days)					50	2
		Total				300	350	30

SEMESTER IV

Sl.No	Course No.	Name of the Course	Hours			Marks		Credit
			L	T	P	Internal	End semester	
1	KBD 1401	Research Methodology	3	0	2	50	50	4
2	KBD 1402	Environmental Management	3	0	2	50	50	4
3	KBD 1403	Modern Project Management Practices	3	0	2	50	50	4
4	KBD 1404	Introduction to Econometric Methods	5	1	0	50	50	5
5	KBD 1405	Predictive Modelling	2	0	6	50	50	5
6	KBD 1406	Elective 1	3	0	2	50	50	4
7.	KBD 1407	Project II -Business Process Mapping for a duration of 15 working days. (50 Marks for continuous assessment, 50 marks for a written report after the completion of the project)					100	4
		Total				300	400	30

SEMESTER V

Sl.No	Course No.	Name of the Course	Hours			Marks		Credit
			L	T	P	Internal	End semester	
1	KBD 1501	Entrepreneurship Development and Management of Startups	4	0	2	50	50	4
2	KBD 1502	Strategic Self Marketing & Personal Branding	5	2	0	50	50	4
3	KBD 1503	Digital marketing and social media analytics	2	3	4	50	50	4
4	KBD 1504	Big Data Analytics	2	0	4	50	50	4
5	KBD 1505	Text and Web Analytics	3	0	4	50	50	5
6	KBD 1506	Business Model Analysis	5	1	0	50	50	5
	KBD 1507	Elective 2	3	1	2	50	50	4
		Total				350	350	30

SEMESTER VI

Sl.No	Course No.	Name of the Course	Max. Marks	Credit
1	KBD 1601	Project III - Main Project & Viva-Voce (Duration-80 days) Evaluation scheme will comprise i) Continuous assessment-100 marks ii) Final report - 100 marks & iii) Viva-Voce-100 marks) This project intends to provide students with real hands-on experience on data analytics. Students can attach themselves to an organisation or work independently for this project. However, the project requires real business data for analytics.	300	26
2	KBD 1602	Workshop on Career Building (10 Days)	100	4
		Total	400	30

LIST OF ELECTIVES

E-1 Practical Accounting in Business Organizations

E-2 Computational Finance

E-3 Investment Analysis and Portfolio Management

E-4 HR Analytics

E-5 Introduction to Machine Learning

E-6 Case Development Skills for Analysts

General - Skill Component Ratio

	Credits
Skill Component	109
General Component	71
Total Credit	180