

B.V.V.S

BASAVESHWAR ENGINEERING COLLEGE, BAGALKOTE-587 102 Department of Computer Applications (MCA)

MCA – I Semester Scheme of teaching and examinations for 2023-2024

SI.						Hours/We	ek	Examination Marks		
No.	Course	Subject Code	Subject	Credits	Lecture	Tutorial	Practical	CIE	SEE	Total
1.	BSC	23PCA101C	Mathematical Foundations for Computer Applications	03	03	-	-	50	50	100
2.	PCC	23PCA102C	Python Programming	04	04	-	-	50	50	100
3.	PCC	23PCA103C	Web Programming	03	03	-	-	50	50	100
4.	PCC	23PCA104C	Operating Systems & Shell Programming	03	03	-	-	50	50	100
5.	IPCC	23PCA105C	Computer Networks	04	03		02	50	50	100
6.	MCC	23PCA106C	Research Methodology & IPR	03	03	-	-	50	50	100
7.	PCCL	23PCA107L	Python Programming Laboratory	02	-	-	04	50	50	100
8.	PCCL	23PCA108L	Web Programming Laboratory	02	-	-	04	50	50	100
9.	SEM	23PCA109S	Seminar	02	-	-	-	50	50	100
10.	ВС	23PCA110C- BC*	Introduction to Programming Languages		03			100		100
	Total				22	04	06	550	450	1000

^{*} BSC-Basic Science Courses, PCC- Professional Core Course, PCCL- Professional Core Courses Lab, IPCC- Integrated Professional Core Course, MCC-Mandatory Core Course, *Only for non-computer science students

Principles of Programming Languages: Principles of Programming Languagescourse is a non-credit course introduced to the students who admits into MCA program from non-computer science background.

Integrated Professional Core Course: The theory part of the IPCC shall be evaluated both by CIE and SEE. The Practical part shall be evaluated by only CIE.

Seminar: The Head of the Department shall make an arrangement for conducting seminars through concerned faculty members of the Department. The committee, constituted for the purpose by the Head of the Department, shall award the CIE marks for the seminar. The committee shall consist of two senior faculty members of the Department and the senior most acting as the Chairperson



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MCA - II Semester Scheme of teaching and examinations for 2023-2024

SI.		Subject	+			Examination Marks				
No.	Course	Code	Subject	Credits	Lecture	Tutorial	Practical	CIE	SEE	Total
1.	PCC	23PCA201C	Data Structures and Algorithms	03	03	1	-	50	50	100
2.	PCC	23PCA202C	Java and J2EE	04	04	-	-	50	50	100
3.	IPCC	23PCA203C	Database Management System	04	03	-	02	50	50	100
4.	PCC	23PCA204C	Technical Communication	03	02	02	-	50	50	100
5.	PEC	23PCAXXXE	Professional Elective-I	03	03	-	-	50	50	100
6	PEC	23PCAXXXE	Professional Elective-II	03	03	-	-	50	50	100
7.	PCCL	23PCA205L	Data Structures Laboratory	02	-	-	04	50	50	100
8.	PCCL	23PCA206L	Java and J2EE Laboratory	02	-	-	04	50	50	100
9.	MP	23PCA207P	Mini Project	02	-	-	04	50	50	100
10	AUD/AEC		ONLINE Courses	Classes & evaluation procedures are as per the policy of the online course providers and BOS						
		_	Total	26	18	06	10	450	450	900

PCC: Professional Core Course, IPCC-Integrated Professional Core Course, PCCL- Professional Core Courses Lab, PEC-Professional Elective Courses, PP-Passing is Mandatory, MP-Mini Project, AUD/AEC -Audit Course / Ability Enhancement Course

Mini Project: Students are expected to take up mini project with a team size not exceeding 3. The objective of this course is to develop real time mini projects using latest technologies.

Online Certification Course: MOOC/NPTEL is the ONLINE course. Student must register and complete the online certification courses individually. Student shall take up any online certification courses which are chosen in the area of computer science. Duration may span from 4 - 12 weeks and should complete the courses during the MCA program. Students must produce the hardcopy of the registration details and confirmation details to the concerned faculty advisor without fail. This course does not have SEE, only CIE marks will be considered for evaluation. A Committee comprising of HoD as Chairman and faculty advisor will evaluate the progress of certification courses and declare the result either PP or NP in 2^{nd} semester.

PNA/S

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	Professional Elective-I	Professional Elective-II				
Subject Code	Subject	Subject Code	Subject			
23PCC208E	Data Mining	23PCC212E	Introduction to Artificial Intelligence			
23PCC209E	Cloud Computing	23PCC213E	DevOps			
23PCC210E	Mobile Application Development	23PCC214E	Android Programming Concepts			
23PCC211E	Computer Vision	23PCC215E	Natural Language Processing			



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BASAVESHWAR ENGINEERING COLLEGE, BAGALKOTE-587 102 Department of Computer Applications (MCA)

MCA – III Semester Scheme of teaching and examinations for 2023-2024

SI.					Hours/Week			Examination Marks		
No.	Course	Subject Code	Subject	Credits	Lecture	Tutorial	Practical	CIE	SEE	Total
1.	PCC	23PCA301C	Agile Practices	3	03	-	-	50	50	100
2.	PCC	23PCA302C	Internet of Things	3	03	-	-	50	50	100
3.	IPCC	23PCA303C	Web 2.0	4	03	-	02	50	50	100
4.	PEC	23PCAXXXE	Professional Elective-III	3	03	-	-	50	50	100
5.	PEC	23PCAXXXE	Professional Elective-IV	3	03	-	-	50	50	100
6.	PCCL	23PCA304L	OOMD Laboratory	2	-	-	04	50	50	100
7.	PCCL	23PCA305L	IoT Laboratory	2	-	-	04	50	50	100
8.	SP	23PCA306P	Societal Project	2	-	-	04	100		100
9.	INTR	23PCA307I	Internship	04	(08 weeks of Internship completed during the intervening vacation of II and III semesters)			50	50	100
			Total	26	15	04	10	500	400	900

PCC: Professional Core Course, IPCC - Integrated Professional Core Course, PEC - Professional Elective Courses, PCCL - Professional Core Courses Lab, MP-Mini Project, SP-Societal Project, INT-Internship

Societal Project: Students in consultation with the internal guide for applying technology to workout/proposing viable solutions for societal problems. CIE marks shall be awarded by a committee comprising of HoD as Chairman, Guide and a HoD nominee. The CIE marks awarded, shall be based on the evaluation of Project Report, Project Presentation skill, and performance in the Question and Answer session in the ratio of 50:25:25. Those, who have not pursued /completed the Societal Project, shall be declared as fail in the course and have to complete the same during subsequent semester/s after satisfying the Societal Project requirements. There is no SEE for this course.

Internship: All the students shall have to undergo a mandatory internship of 08 weeks during the intervening vacation of II and III semesters. CIE marks shall be awarded by a committee comprising of HoD as Chairman, Guide and a HoD nominee. The 50% CIE marks is awarded based on the evaluation of report and Presentation skill. SEE is evaluated for 50% by internal and an external examiner. Those, who have not pursued /completed the Internship, shall be declared as fail in the course and have to complete the same during subsequent semester/s after satisfying the Internship requirements.

PNACE

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	Professional Elective-III	Professional Elective-IV				
Subject Code	Subject	Subject Code	Subject			
23PCA308E	Big Data and Analytics	23PCA312E	Introduction to Machine Learning			
23PCA309E	Cyber Security	23PCA313E	Block Chain			
23PCA310E	Dart and Flutter Framework	23PCA314E	Modern Application Development			
23PCA311E	Software Testing	23PCA315E	User Interface Design			



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MCA – IV Semester Scheme of teaching and examinations for 2023-2024

SI.	Course	Subject	Subject	Credits	Hours/Week			Examination Marks		
No.	Course	Code		Credits	Lecture	Tutorial	Practical	CIE	SEE	Total
1.	PROJ	23PCA401P	Project Work	22	-	-	-	50	50	100
			Total	22	•	-	•	50	50	100

Project Work:The project work shall be carried out individually. CIE marks shall be awarded by a committee comprising of HoD as Chairman, Guide/Co-guide and a HoD Nominee. CIE evaluation shall be based on the Project Report,ProjectPresentationskill, andperformanceintheQuestion andAnswer sessionintheratio of 50:25:25. SEE shall be awarded by a committee comprising of Internal, External examiner and HoD nominee. SEEevaluationshall be based on project report, live demo/source code analysis, question & answer sessionaftersatisfyingtheplagiarism check. Plagiarism check shallbeaspertheUniversitynorms.