# **Department Profile**

Name of the Department: Department of Computer Science

Year of Establishment: 1989

#### 1. From The Desk Of Head:

Established in 1989, the Department of Computer Science has a rich history of taking the lead in Teaching, Research & Development in frontier areas of Computer Science and allied domains. Department offers three postgraduate programmes namely MCA (Master of Computer Application), MSc (Computer Science), and PG Diploma in Data Science, and BCA (Bachelor of Computer application) under science faculty as undergraduate programme. This year (2024) department is starting BSc-MSc AI & ML five years integrated programme under PM-USHA scheme of Government of India. All programmes are designed as per NEP-2020 with multiple entry exit option. Here Main objective is to develop human resources with core competence in various thrust areas of Computer Science like generative AI, Artificial Intelligence, Cloud computing, Data science, Natural language processing and Machine Learning. Other modules include emerging programming, data analytics, software development, Computer networks, database design etc. Our programme focus on preparing students for innovation within major tech companies or entrepreneurship within start-up ventures. Guest lectures, case studies and presentations are organized from time to time to give an insight into the latest development and happenings in the industry. Its not only technical skills of the students but even soft skills of the students are developed with the focus on communication and personality development.

Department has ICT enabled classrooms and three Computer Labs with 200 high configuration computers. A specialized cyber security lab is also functioning to foster the cyber security research. A new Computer Science building is getting ready where BCA and BSc-MSc integrated programme will be hosted.

Experiential learning is imparted in the form of projects and internship. Students are motivated for self learning for the latest trends in Computer Science in the form of delivering the seminars. Workshops and expert lectures are organized to give wider exposure the students. Other than academics students are also encouraged to participate in sports activities and cultural events. We do have sports week as well as welcome, sendoff and traditional days celebrations.

Given the rapid rate of obsolescence of knowledge, especially in Computational Sciences, the department faculty strives their best to keep abreast with the technology. Department has all doctoral faculty to provide theoretical as well as practical knowledge to students. Almost all the faculties are PhD's in Computer Science and plays an important role to foster research activities of Department.

Department has a very strong alumni with a very good Alumni interaction, each weekend one of the alumni visits the department and guides students about the current technologies in the IT industry. Some of the alumnae are directors of the company; some are placed in reputed IT companies like Microsoft, Google, Intel etc. One of the alumni has started endowment lecture series, another has started a merit scholarship for MCA students who are from economically weaker section and there are many more. Alumni play an important role in placement activities of students.

Dr Kavita S. Oza, Head, Department of Computer Science, Shivaji University, Kolhapur

#### 2. Brief History of the department along with present focus in academic & research



The Department of Computer Science was established in the year 1989. Academic programs offered by the department are: M.C.A, M.Sc, PGDDS, B. Sc.-M. Sc.-Integrated (AI & ML), B.C.A, M.Phil and Ph.D. The faculties have expertise in various fields of research like machine learning, data mining, mobile computing, soft computing, artificial neural network, Technology integration in pedagogy using LMS and cybersecurity. Department has signed MoUs with Google, C-DAC, Quick Heal

Foundation and have organized various workshops for the faculties to bridge the industry-academia gap. Currently the department is in forefront in conducting FDPs in Cyber Security and Data Science under the ages of MHRD with grants in aid support of over Rs. 6 Crore.

Department of Computer Science adopts innovative teaching-learning methods that involve experiential learning with more focus on hands-on due to the inherent nature of the subject itself. This is further augmented by providing industrial exposure to the students by the way of "industry visits" and internship program with CDAC, Pune. Teaching-learning in the department is synergized with adoption of ICT more specifically using MOODLE and Google Classroom. Few courses in the department such as "web designing" are in great demand by the students from other departments under Choice Based Credit System.

The faculty uses open source tools such as Kahoot and MOODLE for evaluation of the students. The research conducted by the department faculty is applied in nature that addresses the prevalent issues of the society. Alumni of the department are well placed in MNCs and blue chip companies and they make it a point to give back to their alma matter by sharing their rich expertise with students and arranging the placement camps. One of the alumnus has contributed to start a lecture series on "Turing Awardees" which has become an annual affairs strengthening the link between the present and past students of the department.

#### 3. Vision

To impart training to analyze problems and develop human resources in order to produce computer Professionals, academics and researchers.

#### Mission

To train students for fundamental and advanced programming techniques right from essential mathematics and managerial science to high performance computing and soft computing.

#### **Goals of the Department**

- 1. To create a fine band of capable young researchers/ teachers /professionals with great thirst for new technologies, techniques and methodologies.
- 2. To produce technocrats to help society to cope up with challenges in new era of technologies.
- 3. To provide opportunities to young graduates of the university to reach his/her highest personnel and professional competence

#### **Core Values**

- To create a fine band of capable young researchers/ teachers /professionals with great thirst for new technologies, techniques and methodologies.
- > To produce technocrats to help society to cope up with challenges in new era of technologies.
- To provide opportunities to young graduates of the university to reach his/her highest personnel and professional competence.
- To inculcate human values and professional ethics among students.

#### 4. Academic Programmes offered with intake capacity:

Sr. No.	Programme	Year of Inception	Intake Capacity
1	M.C.A	1989	60
2	M.Sc.	2004	60
3	B.Sc M.Sc. AI & ML (five years integrated programme)	2024	30
4	BCA	2022	60
5	P.G. Diploma in Data Science(PGDDS)	2021	40
6	Ph.D.	2000	As per available vacancies

#### **5.** Programme Structure

## Structure in Accordance with National Education Policy - 2020 With Multiple Entry and Multiple Exit M.Sc. (Computer Science) Part – I (Level-6.0)

#### M.Sc. Part I - Semester I

	Course	Γ	Ceaching So	cheme	Examination	Scheme					
	Code	Th	eory and F	ractical	Un	iversity Asse	ssment (UA)	Inter (IA)	rnal Ass	sessment	
		Lectures + Tutorial/ (Hours/	Practic al (Hour	Credit	Maximum Marks	Minimum Marks	Exam. Hours	Maximum Marks	Minir um Ma	m. rk Ho	
		week)	s/ week)						S	urs	
Semester-I			week)								
	MMT-101	4		4	80	32	3	20	8	1	
Major	MMT-102	4		4	80	32	3	20	8	1	
Mandator y	MMPR- 103		8	4	80	32	3	20	8	1	
	MMT-104	2		2	40	16	2	10	4	1	
Major	MET-105	4		4	80	32	3	20	8	1	
Elective	MET-106										
Research	RM-107	4		4	80	32	3	20	8	1	
Methodolog											
y											
Total				22	440			110			
Semester-II											
	MMT-201	4		4	80	32	3	20	8	1	
Major	MMT-202	4		4	80	32	3	20	8	1	
Mandator y	MMPR - 203		8	4	80	32	3	20	8	1	
	MMT-204	2		2	40	16	2	10	4	1	
Major	MET-205	4		4	80	32	3	20	8	1	
Elective	MET-206										
OJT/FP	OJT-207			4	*						
Total				22	440			110			
Total (Sem I	+ Sem II)			44							

•	MMT–Ma	jor M	Iandatory	Theory
---	--------	-------	-----------	--------

- MMPR–Major Mandatory Practical
- MET–Major Elective Theory
- MEPR-Major Elective Practical
- RM Research Methodology
- OJT/FP- On Job Training/ Field Project

- Total Marks for M.Sc.-I : 1100
- Total Credits for M.Sc.-I (Semester I & II):
- Separate passing is mandatory for University and Internal Examinations

\*Evaluation scheme for OJT/FP shall be decided by concerned BOS

- Requirement for Entry at Level 6.0: Completion of Level 5.5
- Requirement for Exit after Level 6.0:
- Requirement for Entry at Level 6.5: He/ She have completed MSc Part-I (Level 6.0)

Students can exit after completion of Level 6.0 with Post Graduate Diploma in Computer Science

# Structure in Accordance with National Education Policy - 2020 With Multiple Entry and Multiple Exit Options

M.Sc. (Computer Science) Part – II (Level-6.5)

	Course	Teac	hing Schem	e		E	xamination S	Scheme		
	Code	Theory and Pa	ractical			Assessment (U		Internal Asse		
		Lectures + Tutorial (Per week)	Hours (Per week)	Credit	Maximum Marks	Minimum Marks	Exam. Hours	Maximum Marks	Minimum Marks	Exam. Hours
				Seme	ester-III					
Major	MMT- 301	4		4	80	32	2 3	20	8	1
Mandatory	MMT- 302	4		4	80	32	2 3	20	8	1
	MMPR 303		8	4	80	32	2 3	20	8	1
	MMT- 304	2		2	40	10	5 2	10	4	1
Major Elective	MET- 305 MET- 306	4		4	80	32	2 3	2 0	8	1
Research Project	RP-307			4	80	32	2	20	8	
Tot al				22	440			110		
				Seme	ester-IV					
Major	MMT- 401	4		4	80	32	2 3	20	8	1
Mandatory	MMT- 402	4		4	80	32	2 3	20	8	1
	MMPR 403		8	4	80	32	2 3	20	8	1
Major Elective	MET- 404 MET-	4		4	80	3 2	3	2 0	8	1
Research	405 RP-406			6	100	40	)	50	2	_
Project	101 -100					7(			0	-
Tot al				22	420			130		
Total (Sem III IV)	I + Sem			44						



- MMPR–Major Mandatory Practical
- MET–Major Elective Theory
- MEPR–Major Elective Practical
- RP- Research Project

- Total Marks for M.Sc.-II : 1100
- Total Credits for M.Sc.-II (Semester III & IV): 44
  - Separate passing is mandatory for University and InternalExaminations

# Evaluation scheme for Research Project shall be decided by concerned BOS

• Requirement for Exit after Level 6.5: Students can exit after completion of Level 6.5 with Master of Computer Science

# **Course Codes**

Course Code         Major Mandatory           MMT-101         Design and Analysis of Algorithms (4 credits)         MSU0325MML99G2 credits)           MMT-102         Advanced Database Management System (4 credits)         MSU0325MML99G2 credits)           MMPR-103         Practical-I (4 credits)         MSU0325MML99G3           MMT-104         Web Design (2 credits)         MSU0325MML99G3           RM-107         Research Methodology (4 credits)         MSU0325ML99G3           MET-105         Cyber Security (4 credits)         MSU0325MEL99G1           MET-106         Cloud Computing (4 credits)         MSU0325MEL99G2           M.Sc. Semester-II         Major Mandatory           MMT-201         Advanced Java (4 credits)         MSU0325MML99H3           MMT-202         Artificial Intelligence (4 credits)         MSU0325MML99H1           MMT-203         Practical-II (4 credits)         MSU0325MML99H3           MT-204         Angular JS (2 credits)         MSU0325MML99H3           MSU0325MIL99H1         MSU0325MIL99H3           MET-205         Intenship (4 credits)         MSU0325ML99H1           MET-206         Block Chain Technology (4 credits)         MSU0325ML99H2           MSC. Semester-III         Major Mandatory         MSU0325ML99H3           MMT-301         Advanced P	M.Sc. Semes	ster-I	
MMT-102         Advanced Database Management System (4 credits)         MSU0325MML99G2 credits)           MMPR-103         Practical-I (4 credits)         MSU0325MMP99G1           MMT-104         Web Design (2 credits)         MSU0325MML99G3           RM-107         Research Methodology (4 credits)         MSU0325ML99G           MET-105         Cyber Security (4 credits)         MSU0325MEL99G1           MET-106         Cloud Computing (4 credits)         MSU0325MEL99G2           W.Sc. Semester-II         Major Mandatory           MMT-201         Advanced Java (4 credits)         MSU0325MML99H1           MMT-202         Artificial Intelligence (4 credits)         MSU0325MML99H2           MMPR-203         Practical-II (4 credits)         MSU0325MML99H3           OJT-207         Internship (4 credits)         MSU0325MML99H1           MET-205         Image Processing (4 credits)         MSU0325ML99H1           MET-205         Image Processing (4 credits)         MSU0325ML99H2           M.Sc. Semester-III         Major Mandatory           MMT-301         Advanced PHP (4 credits)         MSU0325MML9911           MMT-302         Data Science (4 credits)         MSU0325MML9911           MMT-304         Data Engineering (2 credits)         MSU0325MML9911           MMT-305	Course Code	Major Mandatory	
MMT-102         Advanced Database Management System (4 credits)         MSU0325MML99G2 credits)           MMPR-103         Practical-I (4 credits)         MSU0325MMP99G1           MMT-104         Web Design (2 credits)         MSU0325MML99G3           RM-107         Research Methodology (4 credits)         MSU0325ML99G           MET-105         Cyber Security (4 credits)         MSU0325MEL99G1           MET-106         Cloud Computing (4 credits)         MSU0325MEL99G2           W.Sc. Semester-II         MSU0325MML99G2           M.Sc. Semester-II         MSU0325MML99G2           MMT-201         Advanced Java (4 credits)         MSU0325MML99H2           MMT-202         Artificial Intelligence (4 credits)         MSU0325MML99H1           MMPR-203         Practical-II (4 credits)         MSU0325MML99H2           MMPR-204         Angular JS (2 credits)         MSU0325MML99H3           OJT-207         Internship (4 credits)         MSU0325ML99H3           MET-205         Image Processing (4 credits)         MSU0325ML99H1           MET-206         Block Chain Technology (4 credits)         MSU0325ML99H2           M.Sc. Semester-III         MSU0325ML99I1           MMT-301         Advanced PHP (4 credits)         MSU0325MML99I1           MMT-302         Data Science (4 credits) <td>MMT-101</td> <td>Design and Analysis of Algorithms (4 credits)</td> <td>MSU0325MML99G1</td>	MMT-101	Design and Analysis of Algorithms (4 credits)	MSU0325MML99G1
MMPR-103         Practical-I (4 credits)         MSU0325MMP99GI           MMT-104         Web Design (2 credits)         MSU0325MMI.99G3           RM-107         Research Methodology (4 credits)         MSU0325RMI.99G           MET-105         Cyber Security (4 credits)         MSU0325MEL.99GI           MET-106         Cloud Computing (4 credits)         MSU0325MEL.99G2           M.Sc. Semester-II         Major Mandatory           MMT-201         Advanced Java (4 credits)         MSU0325MMI.99H1           MMT-202         Artificial Intelligence (4 credits)         MSU0325MMI.99H2           MMPR-203         Practical-II (4 credits)         MSU0325MMI.99H3           MMT-204         Angular JS (2 credits)         MSU0325MMI.99H1           MMT-207         Intenship (4 credits)         MSU0325MI.99H1           MET-205         Image Processing (4 credits)         MSU0325MEI.99H1           MET-206         Block Chain Technology (4 credits)         MSU0325MEI.99H2           M.Sc. Semester-III         Major Mandatory         MSU0325MMI.99I3           MMT-301         Advanced PHP (4 credits)         MSU0325MMI.99I1           MMT-302         Data Science (4 credits)         MSU0325MMI.99I2           MPR-303         Practical-III (4 credits)         MSU0325MMI.99I3	MMT-102		MSU0325MML99G2
MMT-104         Web Design (2 credits)         MSU0325ML99G3           RM-107         Research Methodology (4 credits)         MSU0325RML99G           Major Elective           MET-105         Cyber Security (4 credits)         MSU0325MEL99G1           MET-106         Cloud Computing (4 credits)         MSU0325MEL99G2           M.Sc. Semester-II           Major Mandatory           MMT-201         Advanced Java (4 credits)         MSU0325MML99H1           MMT-202         Artificial Intelligence (4 credits)         MSU0325MML99H2           MMPR-203         Practical-II (4 credits)         MSU0325MML99H3           MMT-204         Angular JS (2 credits)         MSU0325MML99H3           MT-207         Internship (4 credits)         MSU0325MML99H3           MET-205         Image Processing (4 credits)         MSU0325MEL99H1           MET-206         Block Chain Technology (4 credits)         MSU0325MEL99H2           M.Sc. Semester-III         Major Mandatory         MSU0325MML99I3           MMT-301         Advanced PHP (4 credits)         MSU0325MML99I1           MMT-302         Data Science (4 credits)         MSU0325MML99I1           MMT-304         Data Engineering (2 credits)         MSU0325MML99I1 <td></td> <td>•</td> <td></td>		•	
RM-107   Research Methodology (4 credits)   MSU0325RML99G   Major Elective	MMPR-103	Practical-I (4 credits)	MSU0325MMP99G1
Major Elective           MET-105         Cyber Security (4 credits)         MSU0325MEL99G1           MET-106         Cloud Computing (4 credits)         MSU0325MEL99G2           M.Sc. Semester-II           Major Mandatory           MMT-201         Advanced Java (4 credits)         MSU0325MML99H1           MMPR-203         Practical-II (4 credits)         MSU0325MML99H2           MMPR-204         Angular JS (2 credits)         MSU0325MML99H3           OJT-207         Internship (4 credits)         MSU0325MML99H3           OJT-207         Internship (4 credits)         MSU0325MEL99H1           MET-205         Image Processing (4 credits)         MSU0325MEL99H1           MET-206         Block Chain Technology (4 credits)         MSU0325MEL99H2           M.Sc. Semester-III         MSU0325MML99I3           MMT-301         Advanced PHP (4 credits)         MSU0325MML99I3           MMT-302         Data Science (4 credits)         MSU0325MML99I3           MRP-303         Practical-III (4 credits)         MSU0325MML99I3           MP-307         Research Project (4 credits)         MSU0325MEL99I1           MET-306         Machine Learning (4 credits)         MSU0325MEL99I1           MET-306         Machine Learning (4 credits) </td <td>MMT-104</td> <td>Web Design (2 credits)</td> <td>MSU0325MML99G3</td>	MMT-104	Web Design (2 credits)	MSU0325MML99G3
MET-105         Cyber Security (4 credits)         MSU0325MEL99G1           MET-106         Cloud Computing (4 credits)         MSU0325MEL99G2           M.Sc. Semester-II         Major Mandatory           MMT-201         Advanced Java (4 credits)         MSU0325MML99H1           MMT-202         Artificial Intelligence (4 credits)         MSU0325MML99H2           MMPR-203         Practical-II (4 credits)         MSU0325MML99H3           MJT-207         Internship (4 credits)         MSU0325MML99H3           OJT-207         Internship (4 credits)         MSU0325MML99H3           MSU0325MML99H3           MET-205         Image Processing (4 credits)         MSU0325MEL99H1           MET-206         Block Chain Technology (4 credits)         MSU0325MEL99H2           M.Sc. Semester-III           Major Mandatory           MMT-301         Advanced PHP (4 credits)         MSU0325MML99I1           MMPR-302         Data Science (4 credits)         MSU0325MML99I2           MMPR-303         Practical-III (4 credits)         MSU0325MML99I3           MP-307         Research Project (4 credits)         MSU0325MEL99I1           Major Elective           MET-306	RM-107	Research Methodology (4 credits)	MSU0325RML99G
MET-106         Cloud Computing (4 credits)         MSU0325MEL99G2           M.Sc. Semester-II           Major Mandatory           MMT-201         Advanced Java (4 credits)         MSU0325MML99H1           MMT-202         Artificial Intelligence (4 credits)         MSU0325MML99H2           MMPR-203         Practical-II (4 credits)         MSU0325MML99H3           MJT-207         Internship (4 credits)         MSU0325MML99H3           MET-207         Internship (4 credits)         MSU0325MEL99H1           MET-205         Image Processing (4 credits)         MSU0325MEL99H1           MET-206         Block Chain Technology (4 credits)         MSU0325MEL99H2           M.Sc. Semester-III         Major Mandatory           MMT-301         Advanced PHP (4 credits)         MSU0325MML99I1           MMT-302         Data Science (4 credits)         MSU0325MML99I1           MMT-303         Practical-III (4 credits)         MSU0325MML99I1           MMT-304         Data Engineering (2 credits)         MSU0325MML99I3           RP-307         Research Project (4 credits)         MSU0325MEL99I1           MET-305         Big Data Analytics (4 credits)         MSU0325MEL99I2           M.Sc. Semester-IV         MSU0325ML99I3           MMT-401         Mob		Major Elective	
Major Mandatory	MET-105	Cyber Security (4 credits)	MSU0325MEL99G1
Major Mandatory	MET-106	Cloud Computing (4 credits)	MSU0325MEL99G2
MMT-201         Advanced Java (4 credits)         MSU0325MML99H1           MMT-202         Artificial Intelligence (4 credits)         MSU0325MML99H2           MMPR-203         Practical-II (4 credits)         MSU0325MMP99H1           MMT-204         Angular JS (2 credits)         MSU0325MML99H3           OJT-207         Internship (4 credits)         MSU0325ML99H3           Major Elective           MET-205         Image Processing (4 credits)         MSU0325MEL99H1           MET-206         Block Chain Technology (4 credits)         MSU0325MEL99H2           M.Sc. Semester-II           Major Mandatory           MMT-301         Advanced PHP (4 credits)         MSU0325MML99I1           MMT-302         Data Science (4 credits)         MSU0325MML99I2           MMPR-303         Practical-III (4 credits)         MSU0325MML99I3           RP-307         Research Project (4 credits)         MSU0325MEL99I           MET-305         Big Data Analytics (4 credits)         MSU0325MEL99I           MET-306         Machine Learning (4 credits)         MSU0325MEL99I2           M.Sc. Semester-IV         MSU0325ML99J1           MMT-401         Mobile Application Development (4 credits)         MSU0325MML99J2           MMPR-403         Practical-IV (	M.Sc. Semeste	er-II	
MMT-202 Artificial Intelligence (4 credits)  MMPR-203 Practical-II (4 credits)  MMPR-204 Angular JS (2 credits)  MSU0325MML99H3  OJT-207 Internship (4 credits)  MSU0325OJ99H  Major Elective  MET-205 Image Processing (4 credits)  MSU0325MEL99H1  MET-206 Block Chain Technology (4 credits)  MSU0325MEL99H2  M.Sc. Semester-III  Major Mandatory  MMT-301 Advanced PHP (4 credits)  MSU0325MML99I1  MMPR-302 Data Science (4 credits)  MSU0325MML99I2  MMPR-303 Practical-III (4 credits)  MSU0325MML99I3  RP-307 Research Project (4 credits)  MSU0325MML99I3  RP-307 Research Project (4 credits)  MSU0325MPL99I1  MET-306 Machine Learning (4 credits)  MSU0325MEL99I1  MET-306 Machine Learning (4 credits)  MSU0325MML99J1  MSU0325MEL99I2  M.Sc. Semester-IV  MMT-401 Mobile Application Development (4 credits)  MSU0325MML99J1  RP-406 Research Project (6 credits)  MSU0325MPP9J1  RP-406 Research Project (6 credits)  MSU0325MPP9J1  RET-404 Natural Language Processing (4 credits)  MSU0325MEL99J1		Major Mandatory	
MMPR-203         Practical-II (4 credits)         MSU0325MMP99H1           MMT-204         Angular JS (2 credits)         MSU0325MML99H3           OJT-207         Internship (4 credits)         MSU0325MJP9H           Major Elective           MET-205         Image Processing (4 credits)         MSU0325MEL99H1           MET-206         Block Chain Technology (4 credits)         MSU0325MEL99H2           M.Sc. Semester-III           MMT-301         Advanced PHP (4 credits)         MSU0325MML99I1           MMT-302         Data Science (4 credits)         MSU0325MML99I2           MMPR-303         Practical-III (4 credits)         MSU0325MML99I3           RP-307         Research Project (4 credits)         MSU0325MML99I3           RP-307         Research Project (4 credits)         MSU0325MEL99I1           MET-305         Big Data Analytics (4 credits)         MSU0325MEL99I1           MET-306         Machine Learning (4 credits)         MSU0325MML99J2           MMT-401         Mobile Application Development (4 credits)         MSU0325MML99J1           MSU0325MML99J1         MSU0325MML99J2           MMPR-403         Practical-IV (4 credits) (4 credits)         MSU0325MMP99J1           RP-406         Research Project (6 credits)         MSU0325MEL99J	MMT-201	Advanced Java (4 credits)	MSU0325MML99H1
MMT-204         Angular JS (2 credits)         MSU0325MML99H3           OJT-207         Internship (4 credits)         MSU0325OJ99H           Major Elective           MET-205         Image Processing (4 credits)         MSU0325MEL99H1           MET-206         Block Chain Technology (4 credits)         MSU0325MEL99H2           M.Sc. Semester-III           MMT-301         Advanced PHP (4 credits)         MSU0325MML99I1           MMT-302         Data Science (4 credits)         MSU0325MML99I2           MMPR-303         Practical-III (4 credits)         MSU0325MML99I3           MPR-304         Data Engineering (2 credits)         MSU0325MML99I3           RP-307         Research Project (4 credits)         MSU0325MEL99I1           MET-305         Big Data Analytics (4 credits)         MSU0325MEL99I1           MET-306         Machine Learning (4 credits)         MSU0325MEL99I2           M.Sc. Semester-IV         MSU0325MML99J1           MMT-401         Mobile Application Development (4 credits)         MSU0325MML99J1           MMPR-403         Practical-IV (4 credits) (4 credits)         MSU0325MML99J1           MMPR-403         Practical-IV (4 credits) (4 credits)         MSU0325MMP99J1           MP-406         Research Project (6 credits)	MMT-202	Artificial Intelligence (4 credits)	MSU0325MML99H2
Major Elective	MMPR-203	Practical-II (4 credits)	MSU0325MMP99H1
Major Elective           MET-205         Image Processing (4 credits)         MSU0325MEL99H1           MET-206         Block Chain Technology (4 credits)         MSU0325MEL99H2           M.Sc. Semester-III           Major Mandatory           MMT-301         Advanced PHP (4 credits)         MSU0325MML9911           MMT-302         Data Science (4 credits)         MSU0325MML9912           MMPR-303         Practical-III (4 credits)         MSU0325MML9913           MP-304         Data Engineering (2 credits)         MSU0325MML9913           RP-307         Research Project (4 credits)         MSU0325MEL9911           MET-305         Big Data Analytics (4 credits)         MSU0325MEL9911           MET-306         Machine Learning (4 credits)         MSU0325MEL9912           M.Sc. Semester-IV         MSU0325MML99J1           MMT-401         Mobile Application Development (4 credits)         MSU0325MML99J1           (4 credits)         MSU0325MML99J2           MMPR-403         Practical-IV (4 credits) (4 credits)         MSU0325MP99J1           RP-406         Research Project (6 credits)         MSU0325MEL99J1           MET-404         Natural Language Processing (4 credits)         MSU0325MEL99J1	MMT-204	Angular JS (2 credits)	MSU0325MML99H3
MET-205         Image Processing (4 credits)         MSU0325MEL99H1           MET-206         Block Chain Technology (4 credits)         MSU0325MEL99H2           M.Sc. Semester-III         Major Mandatory           MMT-301         Advanced PHP (4 credits)         MSU0325MML99I1           MMT-302         Data Science (4 credits)         MSU0325MML99I2           MMPR-303         Practical-III (4 credits)         MSU0325MML99I1           MMT-304         Data Engineering (2 credits)         MSU0325MML99I3           RP-307         Research Project (4 credits)         MSU0325MML99I3           MET-305         Big Data Analytics (4 credits)         MSU0325MEL99I1           MET-306         Machine Learning (4 credits)         MSU0325MEL99I2           M.Sc. Semester-IV         MMT-401         Mobile Application Development (4 credits)         MSU0325MML99J1 (4 credits)           MMT-402         Full Stack Development (4 credits)         MSU0325MML99J2           MMPR-403         Practical-IV (4 credits) (4 credits)         MSU0325MMP99J1           RP-406         Research Project (6 credits)         MSU0325MEL99J1           MET-404         Natural Language Processing (4 credits)         MSU0325MEL99J1<	OJT-207	Internship (4 credits)	MSU0325OJ99H
MET-206         Block Chain Technology (4 credits)         MSU0325MEL99H2           M.Sc. Semester-III           Major Mandatory           MMT-301         Advanced PHP (4 credits)         MSU0325MML9911           MMT-302         Data Science (4 credits)         MSU0325MML9912           MMPR-303         Practical-III (4 credits)         MSU0325MMP9911           MMT-304         Data Engineering (2 credits)         MSU0325MML9913           RP-307         Research Project (4 credits)         MSU0325MEL991           MET-305         Big Data Analytics (4 credits)         MSU0325MEL9911           MET-306         Machine Learning (4 credits)         MSU0325MEL9912           M.Sc. Semester-IV         MMT-401         Mobile Application Development (4 credits)         MSU0325MML99J1           MMT-402         Full Stack Development (4 credits)         MSU0325MML99J2           MMPR-403         Practical-IV (4 credits) (4 credits)         MSU0325MMP99J1           RP-406         Research Project (6 credits)         MSU0325MEL99J1           MET-404         Natural Language Processing (4 credits)         MSU0325MEL99J1		Major Elective	
M.Sc. Semester-III           Major Mandatory           MMT-301         Advanced PHP (4 credits)         MSU0325MML9911           MMT-302         Data Science (4 credits)         MSU0325MML9912           MMPR-303         Practical-III (4 credits)         MSU0325MMP9911           MMT-304         Data Engineering (2 credits)         MSU0325MML9913           RP-307         Research Project (4 credits)         MSU0325MPL9913           MET-305         Big Data Analytics (4 credits)         MSU0325MEL9911           MET-306         Machine Learning (4 credits)         MSU0325MEL9912           M.Sc. Semester-IV         MMT-401         Mobile Application Development (4 credits)         MSU0325MML99J1           MMT-402         Full Stack Development (4 credits)         MSU0325MML99J2           MMPR-403         Practical-IV (4 credits) (4 credits)         MSU0325MMP99J1           RP-406         Research Project (6 credits)         MSU0325MP99J           Major Elective           MET-404         Natural Language Processing (4 credits)         MSU0325MEL99J1	MET-205	Image Processing (4 credits)	MSU0325MEL99H1
MMT-301 Advanced PHP (4 credits) MSU0325MML99I1 MMT-302 Data Science (4 credits) MSU0325MML99I2 MMPR-303 Practical-III (4 credits) MSU0325MML99I3 MMT-304 Data Engineering (2 credits) MSU0325MML99I3 RP-307 Research Project (4 credits) MSU0325MP99I  Major Elective  MET-305 Big Data Analytics (4 credits) MSU0325MEL99I1 MET-306 Machine Learning (4 credits) MSU0325MEL99I2  M.Sc. Semester-IV  MMT-401 Mobile Application Development (4 credits) MSU0325MML99J1 (4 credits) MSU0325MML99J1  MMT-402 Full Stack Development (4 credits) MSU0325MML99J2  MMPR-403 Practical-IV (4 credits) (4 credits) MSU0325MML99J1  RP-406 Research Project (6 credits) MSU0325RP99J  Major Elective  MET-404 Natural Language Processing (4 credits) MSU0325MEL99J1	MET-206	Block Chain Technology (4 credits)	MSU0325MEL99H2
MMT-301 Advanced PHP (4 credits)  MSU0325MML99I1  MMT-302 Data Science (4 credits)  MSU0325MML99I2  MMPR-303 Practical-III (4 credits)  MSU0325MMP99I1  MMT-304 Data Engineering (2 credits)  MSU0325MML99I3  RP-307 Research Project (4 credits)  MSU0325RP99I  Major Elective  MET-305 Big Data Analytics (4 credits)  MSU0325MEL99I1  MET-306 Machine Learning (4 credits)  MSU0325MEL99I2  M.Sc. Semester-IV  MMT-401 Mobile Application Development (4 credits)  MMT-402 Full Stack Development (4 credits)  MSU0325MML99J1  RP-406 Research Project (6 credits)  MSU0325MML99J1  RP-406 Research Project (6 credits)  MSU0325MPP9J1  RP-406 Natural Language Processing (4 credits)  MSU0325MEL99J1	M.Sc. Semeste	er-III	
MMT-302 Data Science (4 credits)  MSU0325MML99I2  MMPR-303 Practical-III (4 credits)  MSU0325MMP99I1  MMT-304 Data Engineering (2 credits)  RP-307 Research Project (4 credits)  MSU0325MML99I3  RP-305 Big Data Analytics (4 credits)  MSU0325MEL99I1  MET-306 Machine Learning (4 credits)  MSU0325MEL99I2  M.Sc. Semester-IV  MMT-401 Mobile Application Development (4 credits)  MSU0325MML99J1  (4 credits)  MMT-402 Full Stack Development (4 credits)  MSU0325MML99J1  RP-406 Research Project (6 credits)  MSU0325MML99J1  RP-406 Research Project (6 credits)  MSU0325MMP99J1  RP-406 Research Project (6 credits)  MSU0325MPP9J1  MSU0325MPP9J1  MSU0325MPP9J1  MSU0325MPP9J1  MSU0325MPP9J1		Major Mandatory	
MMPR-303 Practical-III (4 credits) MSU0325MMP99I1  MMT-304 Data Engineering (2 credits) MSU0325MML99I3  RP-307 Research Project (4 credits) MSU0325RP99I  Major Elective  MET-305 Big Data Analytics (4 credits) MSU0325MEL99I1  MET-306 Machine Learning (4 credits) MSU0325MEL99I2  M.Sc. Semester-IV  MMT-401 Mobile Application Development (4 credits) MSU0325MML99J1  (4 credits) MSU0325MML99J1  MMT-402 Full Stack Development (4 credits) MSU0325MML99J2  MMPR-403 Practical-IV (4 credits) (4 credits) MSU0325MML99J1  RP-406 Research Project (6 credits) MSU0325RP99J  Major Elective  MET-404 Natural Language Processing (4 credits) MSU0325MEL99J1	MMT-301	Advanced PHP (4 credits)	MSU0325MML99I1
MMT-304 Data Engineering (2 credits)  RP-307 Research Project (4 credits)  MSU0325RP99I  Major Elective  MET-305 Big Data Analytics (4 credits)  MSU0325MEL99I1  MET-306 Machine Learning (4 credits)  MSU0325MEL99I2  M.Sc. Semester-IV  MMT-401 Mobile Application Development (4 credits)  MMT-402 Full Stack Development (4 credits)  MSU0325MML99J1  MMPR-403 Practical-IV (4 credits) (4 credits)  MSU0325MML99J1  RP-406 Research Project (6 credits)  MSU0325MMP99J1  RP-406 Natural Language Processing (4 credits)  MSU0325MEL99I3	MMT-302	Data Science (4 credits)	MSU0325MML99I2
RP-307 Research Project (4 credits)  Major Elective  MET-305 Big Data Analytics (4 credits) MSU0325MEL99I1  MET-306 Machine Learning (4 credits)  MSU0325MEL99I2  M.Sc. Semester-IV  MMT-401 Mobile Application Development (4 credits)  MMT-402 Full Stack Development (4 credits)  MSU0325MML99J1  RP-406 Research Project (6 credits)  MSU0325MMP99J1  RP-406 Research Project (6 credits) MSU0325RP99J  Major Elective  MET-404 Natural Language Processing (4 credits) MSU0325MEL99I1	MMPR-303	Practical-III (4 credits)	MSU0325MMP99I1
MET-305 Big Data Analytics (4 credits) MSU0325MEL99I1 MET-306 Machine Learning (4 credits) MSU0325MEL99I2  M.Sc. Semester-IV  MMT-401 Mobile Application Development (4 credits) MSU0325MML99J1  (4 credits) MSU0325MML99J1  MMT-402 Full Stack Development (4 credits) MSU0325MML99J2  MMPR-403 Practical-IV (4 credits) (4 credits) MSU0325MMP99J1  RP-406 Research Project (6 credits) MSU0325RP99J  Major Elective  MET-404 Natural Language Processing (4 credits) MSU0325MEL99J1	MMT-304	Data Engineering (2 credits)	MSU0325MML99I3
MET-305 Big Data Analytics (4 credits)  MET-306 Machine Learning (4 credits)  MSU0325MEL99I2  M.Sc. Semester-IV  MMT-401 Mobile Application Development (4 credits)  MSU0325MML99J1  (4 credits)  MSU0325MML99J1  MSU0325MML99J2  MMPR-403 Practical-IV (4 credits) (4 credits)  MSU0325MML99J1  RP-406 Research Project (6 credits)  MSU0325MMP99J1  RP-406 Natural Language Processing (4 credits)  MSU0325MEL99J1	RP-307	Research Project (4 credits)	MSU0325RP99I
MET-306 Machine Learning (4 credits)  MSU0325MEL99I2  M.Sc. Semester-IV  MMT-401 Mobile Application Development (4 credits)  MMT-402 Full Stack Development (4 credits)  MSU0325MML99J1  MSU0325MML99J2  MMPR-403 Practical-IV (4 credits) (4 credits)  MSU0325MMP99J1  RP-406 Research Project (6 credits)  MSU0325RP99J  Major Elective  MET-404 Natural Language Processing (4 credits)  MSU0325MEL99J1		Major Elective	
M.Sc. Semester-IV  MMT-401 Mobile Application Development (4 credits)  MMT-402 Full Stack Development (4 credits)  MMPR-403 Practical-IV (4 credits) (4 credits)  RP-406 Research Project (6 credits)  MSU0325MMP99J1  RP-406 MSU0325RP99J  Major Elective  MET-404 Natural Language Processing (4 credits)  MSU0325MEL99J1	MET-305	Big Data Analytics (4 credits)	MSU0325MEL99I1
MMT-401 Mobile Application Development (4 credits)  MMT-402 Full Stack Development (4 credits)  MSU0325MML99J2  MMPR-403 Practical-IV (4 credits) (4 credits)  RP-406 Research Project (6 credits)  MSU0325MMP99J1  RP-407 MSU0325RP99J  MSU0325RP99J  MET-404 Natural Language Processing (4 credits)  MSU0325MEL99J1	MET-306	Machine Learning (4 credits)	MSU0325MEL99I2
(4 credits)  MMT-402 Full Stack Development (4 credits)  MSU0325MML99J2  MMPR-403 Practical-IV (4 credits) (4 credits)  RP-406 Research Project (6 credits)  MSU0325MP99J1  Major Elective  MET-404 Natural Language Processing (4 credits)  MSU0325MEL99J1	M.Sc. Semeste	er-IV	
(4 credits)  MMT-402 Full Stack Development (4 credits)  MSU0325MML99J2  MMPR-403 Practical-IV (4 credits) (4 credits)  RP-406 Research Project (6 credits)  MSU0325MP99J1  Major Elective  MET-404 Natural Language Processing (4 credits)  MSU0325MEL99J1	MMT-401	Mobile Application Development	MSU0325MML99.I1
MMPR-403 Practical-IV (4 credits) (4 credits)  RP-406 Research Project (6 credits)  MSU0325MMP99J1  MSU0325RP99J  Major Elective  MET-404 Natural Language Processing (4 credits)  MSU0325MEL99J1			
RP-406 Research Project (6 credits) MSU0325RP99J  Major Elective  MET-404 Natural Language Processing (4 credits) MSU0325MEL99J1	MMT-402	Full Stack Development (4 credits)	MSU0325MML99J2
Major Elective  MET-404 Natural Language Processing (4 credits) MSU0325MEL99J1	MMPR-403	Practical-IV (4 credits) (4 credits)	MSU0325MMP99J1
MET-404 Natural Language Processing (4 credits) MSU0325MEL99J1	RP-406		MSU0325RP99J
MET-404 Natural Language Processing (4 credits) MSU0325MEL99J1		Major Elective	
	MET-404	•	MSU0325MEL99J1
	MET-405	<u> </u>	

# **B.Sc-M.Sc.-Integrated (AI & ML) (Five years Integrated Programme)**

## Part – I/ Semester – I

SEN	IESTER-I (Duration- Six	Month)									
Sr.	Course Code	Teaching S	cheme		Examination Scheme						
No.		Theory and	Unive	ersity		Internal Assessment					
					Asses	sment (U	JA)	(IA)			
		Lectures	Hours	Credit	Max.	Min.	Exa	Max.	Min.	Exam	
		(Per week)	(Per		Mar	Marks	m.	Marks	Marks	Hours	
			week)		ks		Hour				
							S				
1	CC-101: Basics of	2	2	2	40	16		10	04		
	Python		_	_							
2	CC -102: Fundamentals	2	2	2	40	16		10	04		
2	of Operating System				40	1.6		10	0.4		
3	CCPR -103:	-	-	2	40	16		10	04		
	Programming with										
4	Python Lab Open Elective (OE):	2	2	2	40	16		10	04		
4	Mathematical	2		2	40	10		10	04		
	foundation										
5	Open Elective (OE):	2	2	2	40	16		10	04		
	Basics of RDBMS			2	'0	10		10	01		
6	VSC: Fundamentals of	2	2	2	40	16		10	04		
	Computers	2		2	10			10	04		
7	SEC: Office Automation	2	2	2	40	16		10	04		
	SECTOTION TRANSMISSION	_	_	_		10		10	0.		
8	AEC: Basics of	2	2	2	40	16		10	04		
	Communication										
9	VEC: Fundamentals of	2	2	2	40	16		10	04		
	Environmental Science										
10	IKS: Vedic Mathematics	2	2	2	40	16		10	04		
11	CC: Fundamentals of	2	2	2	40	16		10	04		
	Electronics										
	Total (A)			22	440			110			

		SEMI	ESTER-	II (Durati	ion- Six	Month)				
Sr.	Course Code	Teaching				ation Scl		_		
No.		Theory as	nd Practi	cal		ity Assess	sment		Assessn	nent
				<b>.</b>	(UA)	1	1	(IA)		1
		Lectures	Hours	Credit	Max.	Min.	Exam.	Max.	Min.	Exam
		(Per	(Per		Marks	Marks	Hours	Marks	Marks	Hours
		week)	week)							
1	CC-201:	2	2	2	40	16		10	04	
	Advanced									
	Python									
2	CC -202:	2	2	2	40	16		10	04	
	Advanced									
	Operating System									
3	CCPR -203:	-	-	2	40	16		10	04	
	Advanced									
	Python Lab					1				
4	Open Elective	2	2	2	40	16		10	04	
	(OE): Essential									
	mathematics									
5	Open Elective	2	2	2	40	16		10	04	
	(OE): Advanced									
	RDBMS									
6	VSC: System	2	2	2	40	16		10	04	
	Analysis and									
	Design									
7	SEC: Web	2	2	2	40	16		10	04	
	Designing									
8	AEC: Business	2	2	2	40	16		10	04	
	Communications									
9	VEC:	2	2	2	40	16		10	04	
	Environmental									
	Pollution									
10	IKS: Human	2	2	2	40	16		10	04	
	Values, and Ethics									
11	CC: Introduction	2	2	2	40	16		10	04	
	to Statistical									
	analysis									
	Total (B)			22	440			110		
	Total (A+B)			(22+22)	880	1		220		
				44						

• Student contact hours per week	Total Marks for Master of Science AI and ML (Five
: <b>24</b> Hours (Min.)	years Integrated Programme) Part-I: 1100
Theory and Practical Lectures:	Total Credits for Master of Science AI and ML (Five
60 Minutes Each	years Integrated Programme) Part-I (Semester I & II) :44
CC-Core Course	Practical Examination is Semester wise
CCPR-Core Course Practical	before theory Examination.
RM: Research Methodology	• Examination for CCPR -103 shall be based on
• OJT: On job training Internship:	Semester-I Practical
Student must complete on job	• Examination for CCPR -203 shall be based on
training/ Internship during summer	Semester-II Practical.
break.	*Duration of Practical Examination as per
	respective BOS guidelines
	• Separate passing is mandatory for Theory,
	Internal and Practical Examination

#### **Requirement for Entry at Level 4.5:**

- 1. Passed HSC (10+2) from Science stream
- 2.Admission will be based on MH-CET score.
- 3. 20% seats are reserved for the students with JEE main score and 80% are reserved for the students with MH-CET score. Remaining seats if any will be filled with HSC (Science) score.
- 4. Reservation policy will be as per university norms.
- Exit Option at Level 4.5: Students can exit after Level 4.5 with under graduate certificate course in Computer Science if he/she completes the courses equivalent to minimum of 44 credits and an additional. 4 credits core NSQF course/Internship.

## Multiple Entry and Multiple Exit Option (NEP-2020) BCA Program Structure BCA Part - I (Level-4.5)

		S	EMESTER.	·I (Durat	ion- Six M	Ionth)				
Sr.	Course Code	_	Teaching			ation Sche	me			
No.		Т	heory and Pr	actical	Universit	y Assessme	ent (UA)	Internal Assessment (IA)		
		Lectures (Per week)	Hours (Per week)	Credit	Max. Marks	Min. Marks	Exam. Hours	Max. Marks	Min. Marks	Exam Hours
1	CC-101: Basics of C	2	2	2	40	16		10	04	
2	CC -102: Fundamentals of Operating System	2	2	2	40	16		10	04	
3	CCPR -103: Programming with C Lab	-	1	2	40	16		10	04	
4	Open Elective (OE): Basics of Electronics	2	2	2	40	16		10	04	
5	Open Elective (OE): Basics of RDBMS	2	2	2	40	16		10	04	
6	VSC: Fundamentals of Computers	2	2	2	40	16		10	04	
7	SEC: Office Automation	2	2	2	40	16		10	04	
8	AEC: Basics of Communication	2	2	2	40	16		10	04	
9	VEC: Fundamentals of Environmental Science	2	2	2	40	16		10	04	
10	IKS: Critical Thinking	2	2	2	40	16		10	04	
11	CC: Fundamentals of Mathematics	2	2	2	40	16		10	04	
	Total (A)			22	440			110		

		SE	MESTER-	II (Durat	ion- Six	Month)				
Sr.	Course Code	Tea	ching Sche	me	Examir	nation Sch	eme			
No.		Theo	ry and Prac	University Assessment (UA)			Internal Assessment (IA)			
		Lectures (Per week)	Hours (Per week)	Credit	Max. Marks	Min. Marks	Exam. Hours	Max. Marks	Min. Marks	Exam Hours
1	CC-201: Advanced C	2	2	2	40	16		10	04	
2	CC -202: Advanced	2	2	2	40	16		10	04	
	Operating System									
3	CCPR -203: Advanced C Lab	-	-	2	40	16		10	04	
4	Open Elective (OE): Advanced Electronics	2	2	2	40	16		10	04	
5	Open Elective (OE): Advanced RDBMS	2	2	2	40	16		10	04	
6	VSC: System Analysis and Design	2	2	2	40	16		10	04	
7	SEC: Web Designing	2	2	2	40	16		10	04	
8	AEC: Business Communications	2	2	2	40	16		10	04	
9	VEC: Environmental Pollution	2	2	2	40	16		10	04	
10	IKS: Human Values, and Ethics	2	2	2	40	16		10	04	
11	CC: Matrices and Graph Theory	2	2	2	40	16		10	04	
	Total (B)			22	440			110		
	Total (A+B)			(22+22) 44	880			220		

• Student contact hours per week : 24 Hours (Min.)	Total Marks for BCA-I: 1100
• Theory and Practical Lectures : <b>60</b> Minutes	• Total Credits for B.C.A-I (Semester I &
Each	II): 44
CC-Core Course	Practical Examination is Semester wise
CCPR-Core Course Practical	before theory Examination.
RM: Research Methodology	• Examination for CCPR -103shall be
OJT: On job training Internship: Student	based on Semester-I Practical
must complete on job training/ Internship	• Examination for CCPR -203 shall be
during summer break.	based on Semester-II Practical.
	*Duration of Practical Examination as per
	respective BOS guidelines
	Separate passing is mandatory for
	Theory, Internal and Practical
	Examination
• Requirement for Entry at Level 4.5:	
Completed all requirements of the 10+2	

• Exit Option at Level 4.5: Students can exit after Level 4.5 with under certificate course in Computer Programming if he/she completes the coursesequivalent to minimum of 44 credits and an additional. 4 credits core NSQF course/Internship.

#### Multiple Entry and Multiple Exit Option (NEP-2020) BCA Program Structure BCA Part - II (Level-5.0)

		Sl	EMESTER-	III (Dura	tion- Six	Month)				
Sr.	Course Code		Teaching	Scheme	Examin	ation Sche	me			
No.		Τ	Theory and Pr		Universit	y Assessme	ent (UA)	Internal Assessment (IA)		
		Lectures		Credit	Max.	Min.	Exam.	Max.	Min.	Exam
		,	(Per week)		Marks	Marks	Hours	Marks	Marks	Hours
1	CC-301: Basics of C++	_	2	2	40	16		10	04	
2	CC -302:	2	2	2	40	16		10	04	
	Fundamentals of									
	Software Engineering									
3	CCPR -303:	-	-	2	40	16		10	04	
	Programming with C++ Lab									
4	Open Elective	2	2	2	40	16		10	04	
	(OE): Data									
	warehouse concepts			_	4.0	4.5		1.0	0.4	
5	Open Elective (OE): Basics of Networking	2	2	2	40	16		10	04	
6	VSC: Fundamentals of Cyber security	2	2	2	40	16		10	04	
7	SEC: Core Java	2	2	2	40	16		10	04	
8	AEC: Formal Communication	2	2	2	40	16		10	04	
9	VEC: Basics of Moral Education	2	2	2	40	16		10	04	
10	IKS: Basics of Yoga	2	2	2	40	16		10	04	
11	CC: Basics of Statistics	2	2	2	40	16		10	04	
	Total (A)			22	440			110		

		SE	MESTER-	IV (Dura	tion- Six	Month)				
Sr.	Course Code	Tea	ching Sche	me	Examin	ation Scho	eme			
No.		Theo	ry and Practical University Assessment (UA)				ssment	Internal (IA)	Assessme	ent
			Hours (Per week)	Credit	Max. Marks	Min. Marks	Exam. Hours	Max. Marks	Min. Marks	Exam Hours
1	CC-401: Advanced C++	2	2	2	40	16		10	04	
2	CC -402: Advanced Software Engineering	2	2	2	40	16		10	04	
3	CCPR -403: Advanced C++ Lab	-	-	2	40	16		10	04	
4	Open Elective (OE): Data warehouse techniques	2	2	2	40	16		10	04	
5	Open Elective (OE): Advanced Networking	2	2	2	40	16		10	04	
6	VSC: Essentials of Cyber security	2	2	2	40	16		10	04	
7	SEC: Java Programming	2	2	2	40	16		10	04	
8	AEC: Soft skills	2	2	2	40	16		10	04	
9	VEC: Moral Education	2	2	2	40	16		10	04	
10	IKS: Yoga	2	2	2	40	16		10	04	
11	CC: Fundamentals of Statistics	2	2	2	40	16		10	04	
	Total (B)			22	440			110		
	Total (A+B)			44	880			220		

State in Contact Hours per Week . 21 Hours	Total Marks for BCA-I: <b>1100</b>
Theory and Practical Lectures : 60 Minutes     Each	• Total Credits for B.C.A-II (Semester III & IV): 44
<ul> <li>CC-Core Course</li> <li>CCPR-Core Course Practical</li> <li>RM: Research Methodology</li> <li>OJT: On job training Internship: Student must complete on job training/ Internship during summer break.</li> </ul>	<ul> <li>Practical Examination is Semester wise before theory Examination.</li> <li>Examination for CCPR -303shall be based on Semester-III Practical</li> <li>Examination for CCPR -403 shall be based on Semester-IV Practical.</li> <li>*Duration of Practical Examination as per respective BOS guidelines</li> <li>Separate passing is mandatory for Theory, Internal and Practical Examination</li> </ul>

- Requirement for Entry at Level 5.0: Must have completed Level 4.5
- Exit Option at Level 5.0: Students can exit after Level 5.0 with under Diploma course in Computer Application if he/she completes the courses equivalent to minimum of 44 credits

# BCA Part III Semester V & VI (NEP-2020) Syllabus to be implemented from Academic year 2024-25

								SEM	EST	E	RV							
				T	eachin	ıg S	chen	ne			Examination Scheme							
700		de	Theory			Practical					The	eory		Practical				
Courses	Sr.No	CourseCode	Credits	No. of Lectures	Hours		Credits	No. of Lectures	Hours		Hours	Max	Total Marks	Min	Hours	Max	Min	
	1	DSCE1	2	5	1		-	-	-		2	50	100	40	-	-	-	
	2	DSCE2	2	3	4						2	50			-	1	-	
8	3	DSCE3	2	5	4		-	-	-		2	50	100	40	-	-	-	
rse	4	DSCE4	2	3	4						2	50			-	-	-	
l oo	5	DSCE5	2	5	4		-	-	-		2	50	100	40	-	-	-	
A C	6	DSCE6	2	3	4						2	50			-	-	-	
CGPA Courses	7	DSCE7	2	5	4						2	50	100	40	-	-	-	
Ö	8	DSCE8	2	3	4						2	50	100	40	-	-	-	
	9	DSCE9	-	-	-		2	5	4		-	-	-	-	2	50	20	
	10	DSCE10	-	-	-		2	5	4		-	-	-	-	2	50	20	
	11	DSCE11	ı	-	-		2	5	4		ı	-	-	1	2	50	20	
		Total	16	20	16		6	15	12				400	-	-	150	-	

### Discipline Specific Core (DSC) Courses Semester V

Sr.No.	Course Code	Name of Paper	Marks
1.	DSCE1	Dot NET I	50 (Theory)
2.	DSCE2	Dot NET II	50 (Theory)
3.	DSCE3	Python Programming I	50 (Theory)
4.	DSCE4	Python Programming II	50 (Theory)
5.	DSCE5	Data Science I	50 (Theory)
6.	DSCE6	Data Science II	50 (Theory)
7.	DSCE7	E-Commerce I	50 (Theory)
8.	DSCE8	E-Commerce II	50 (Theory)
9.	DSCE9	Dot NET Lab	50 (Practical)
10.	DSCE10	Python Lab	50 (Practical)
11	DSCE11	Project I	50 (Practical)

							S	EMF	ESTE	R	VI						
				T	eachir	ıg S	Schen	ne		Examination Scheme							
70		Code	7	Theory				Practio	cal			The	eory		P	ractical	1
Courses	Sr. No	Course Co	Credits	No. of Lectures	Hours		Credits	No. of Lectures	Hours		Hours	Max	Total Marks	Min	Hours	Max	Min
	1	DSCF1	2	5	4		-	-	-		2	50	100	40	-	-	-
	2	DSCF2	2	3	4						2	50			-	-	-
80	3	DSCF3	2	. 5	4		-	-	-		2	50	100	40	-	-	-
rse	4	DSCF4	2	3	4						2	50			-	-	-
l oʻ	5	DSCF5	2	5	4		-	-	-		2	50	100	40	-	-	-
A (	6	DSCF6	2	3	4						2	50			-	-	-
CGPA Courses	7	DSCF7	2	5	4						2	50	100	40	-	-	-
Ö	8	DSCF8	2	3	4						2	50	100	40	-	-	-
	9	DSCF9	-	-	-		2	5	4		-	-	-	-	2	50	20
	10	DSCF10	-	-	•		2	5	4		-	-	-	-	2	50	20
	11	DSCF11	-	-	ı		2	5	4		-	-	-	-	2	50	20
		Total	16	20	16		6	15	12				400	-	-	150	-

# Discipline Specific Core (DSC) Courses Semester VI

Sr. No.	Course Code	Name of Paper	Marks
1.	DSCF1	PHP I	50 (Theory)
2.	DSCF2	PHP II	50 (Theory)
3.	DSCF3	Java I	50 (Theory)
4.	DSCF4	Java II	50 (Theory)
5.	DSCF5	Machine Learning I	50 (Theory)
6.	DSCF6	Machine Learning II	50 (Theory)
7.	DSCF7	Cloud Computing I	50 (Theory)
8.	DSCF8	Cloud Computing II	50 (Theory)
9.	DSCF9	PHP Lab	50 (Practical)
10.	DSCF10	Java Lab	50 (Practical)
11	DSCF11	Project II	50 (Practical)

# Post Graduate Diploma in Data Science (PGDDS) (Under Faculty of Science and Technology) To be implemented from the academic year 2021-22

Sr.	Course code	Course title	Theory contact	Practical hours	Credits	University exam	Internal continuous	Total
No			hours per week	per week			assessment	
1	DDS-1	Foundations Of Data Science	2	-	4	50	50	100
2	DDS-2	Python for Data Science	2	-	4	50	50	100
3	DDS-3	AI and Machine Learning	2	-	4	50	50	100
4	DDS-4	Deep Learning	2	-	4	50	50	100
5	DDS-5	Lab I(Based on DDS-2)	-	5	4	80	20	100
6	DDS-6	Lab II(Based on DDS-3 and DDS-4)	-	5	4	80	20	100
7	DDS-7	Project	-	2	4	80	20	100
		Total	8	12	28	440	260	700

#### 6. Outcome Based Education:

#### Name of Programme : Master of Computer Application (MCA)

#### **Program Outcomes**

- 1. Nurture knowledgeable and skilled human resources, employable in Information and Communication Technology (ICT) and Information Technology Enable Services (ITES).
- 2. Ability to apply knowledge of Mathematical Foundations in computing problems.
- 3. Impart knowledge required for planning, designing and building complex Application.
- 4. Software Systems as well as provide support to automated systems or application.
- 5. Produce entrepreneurs who can develop customized software solutions for small to large Enterprises.
- 6. Ability to apply modern IT tools and computational knowledge for developing solutions
- 7. In context to societal, environmental and sustainable development with ethical and Professional responsibility.
- 8. Ability to function as an effective communicator and team member through essential Skills in multidisciplinary projects.

#### **Program Specific Outcomes**

- 1. Understand the concepts and applications in the field of Computing Sciences like Web designing and development, Mobile application development, and Network and communication technologies.
- 2. Apply the learning from the courses and develop applications for real world problems.
- 3. Understand the technological developments in the usage of modern design and development toolsto analyze and design for a variety of applications.
- 4. Communicate in both oral and written forms, demonstrating the practice of professional ethics and the concerns for social welfare.

#### Name of Programme: Master of Computer Science (M.Sc.)

#### **Program Outcomes**

- 1. Communicate computer science concepts, designs, and solutions effectively and professionally
- 2. Apply knowledge of computing to produce effective designs and solutions for specific problems
- 3. Identify, analyse, and synthesize scholarly literature relating to the field of computer science.
- 4. Use software development tools, software systems, and modern computing platforms.
- 5. Prepare for academic roles through NET/SET/PhD
- 6. Apply design and development principles in the construction of software systems of varying complexity.

#### **Program Specific Outcomes**

- 1. Demonstrate understanding of the principles and working of the hardware and softwareaspects of computer systems.
- 2. Ability to understand the structure and development methodologies of software systems. Possess professional skills and knowledge of software design process.
- 3. Familiarity and practical competence with a broad range of programming language and open Source platforms.
- 4. Be acquainted with the contemporary issues, latest trends in technological development andthere by innovate new ideas and solutions to existing problems.

#### Name of Programme: Bachelor of Computer Application (BCA)

#### **Program Outcomes**

Upon successful completion of the BCA, the student should have met the following Outcomes:

- 1. Appreciate and apply mathematical organization, computing, and domain information for the conceptualization of computing models from clear harms.
- 2. Facility to apply and give expert principles and cyber systems in a universal monetary Situation.
- 3. Ability to function as an effective communicator and team member through essential skills in multidisciplinary projects.
- 4. Understand, analyze and develop computer programs in the areas related to algorithms, web design, and networking for efficient design of the computer-based system.
- 5. Classify opportunities, private enterprise dreams, and use of original thoughts to build worth and means for the betterment of the human being and the world.
- 6. Work in the IT sector as a system engineer, software tester, junior programmer, web developer, system administrator, software developer, etc.
- 7. To develop an interdisciplinary approach among the students.

#### **Program Specific Outcomes**

- 1. An ability to enhance the application of knowledge of theory subjects in diverse fields.
- 2. Encouraging students to convert their start-up idea to reality by implementing.
- 3. Focuses on preparing the student for roles in computer applications and the IT industry.
- 4. Develop programming skills, networking skills, learn applications, packages, programming
  - languages, and modern techniques of IT.
- 5. Information about various computer applications and the latest development in IT and communication systems is also provided .
- 6. Ability to identify, formulates, analyze and solve problems of programming using different languages.
- 7. Take up self-employment in the Indian & global software market.
- 8. To pursue a career in the corporate sector can opt for M.Sc, MCA.
- 9. The student will be able to know various issues, and the latest trends in technology development and thereby innovate new ideas and solutions to existing problems.

# 7. Faculty Details

1	Name	Dr. Kavita S.	Oza				
2	Date of Birth	06-05-1970					
3	Unique ID	50052					
4	Education Qualifications	BSc. MCA, P	hD				
5	Work Experience	Teaching	Res	earch	Industry		Others
		25	13				
6	Area of Specialization	AI & Machin	e Lear	ning			
7	Courses taught	DAA, Theory Kotlin, Mach		-	AI, Andro	id fuı	ndamentals with
8	Research guidance (Number of Students)	10					
9	No. of papers published	National	Intern	ational	National		International
		Journals	Journ	als	Conferen	ces	Conferences
		02	67		19		19
10	Ph.D.	Completed			Ongoing		
		05			05		
11	Projects Carried out	03					
12	Patents (& Granted)	Filed			Granted		
	,	01			01		
13	Technology Transfer						
14	Research Publications	National	Inte	rnational	National		International
		Journals	Jou	ırnals	Conferen	ces	Conferences
		02	67		19		19
15	Books published with details	Name of the I	ook	Publisher ISBN	r with	Yea	ar of publication
				17		201	5-2023
16	Date of Joining	07-09-1999				1	
17	Date of Retirement	31-05-2030					
18	Type of association						
19	Permanent Faculty	yes					
20	Adjunct Faculty	Ĭ					
21	Visiting faculty						

1	Name	Dr. Urmila	R. Pol							
2	Date of Birth	28/06/1969								
3	Unique ID	U-0010/5								
4	Education Qualifications	MCA, Ph.D	١.							
5	Work Experience	Teaching	Teaching Research Industry							
		26	20		1	2				
6	Area of Specialization	Technologie	es		ning, AI, LMS, Open S					
7	Courses taught				science, AI, Mobile Apglin, Linux Operating S	-				
8	Research guidance (Number of Students)	4	4							
9	No. of papers published	National Journals	International Conferences							
10	Ph.D.	Completed 2			Ongoing 2					
11	Projects Carried out	3			I					
12	Patents (& Granted)	Filed			Granted					
		6								
13	Technology Transfer		1 -		T	1 -				
14	Research Publications	National	Internation	al	National	International				
		Journals	Journals		Conferences	Conferences				
		4	19		7	7				
15	Books published with	Name of the		Pıı	blisher with ISBN	Year of				
	details	1 (4111)	0 0 0 11		(	publication				
					1. 978-9988-2-0504-	1				
		1. Book-	Advance		1					
		Java	Published							
		BY Institute	Shiv-India of							
		manage								
		technol	ogy SIIMT-							
		Accra, Ghana 2. BOOK- Referance								
		Guide To Android								
			Application Guide To Android							
		Develo	pment							
		Shiv-In	dia Institute							

_			
		of management & 2. 978-9988-2-863-7 technology SIIMT-	
		Accra, Ghana 3. BOOK- Linux In 3. 978-9988-2-	
		easy way Shiv- India Institute of management & technology SIIMT-	
		Accra, Ghana 4. BOOK- big data Shiv-India Institute of	
		management & technology SIIMT-Accra, Ghana 5. 978-9988-2-	
		Programming Shiv-India Institute of management & technology SIIMT-Accra,	
		Ghana 6. BOOK- HTML Shiv-India Institute of management & technology SIIMT-Accra, Ghana	
		7. BOOK- C++ programming in easy way Shiv- India Institute of management & technology SIIMT-Accra, Ghana	
		8. cyber shikshak 8. 978-81-951460- 5-5	
16	Date of Joining	5/03/2008	
17	Date of Retirement	30/06/2029	
		30/00/2029	
18 19	Type of association	Vac	
20	Permanent Faculty	yes	
21	Adjunct Faculty Visiting faculty		
<i>L</i> 1	v isiting faculty		

1	Name	Dr. Kabir G	. Khara	ıde				
2	Date of Birth	22/07/1987						
3	Unique ID	U-0010/240						
4	Education Qualifications	MCA, Ph.D						
5	Work Experience	Teaching	Res	search	Industry		Others	
		12		7	0		0	
6	Area of Specialization	Artificial In	telligen	ce, Machir	ne Learning	5,		
7	Courses taught	Web Techno	ology					
8	Research guidance (Number of Students)	0						
9	No. of papers published	National		ational	National		International	
		Journals Conferences Conferences						
		0		30	20		14	
10	Ph.D.	Completed					1	
11	Projects Carried out	0						
12	Patents (& Granted)	Filed			Granted			
		02			02			
13	Technology Transfer							
14	Research Publications	National	Inte	ernational	National		International	
		Journals	Jou	ırnals	Conferen	ces	Conferences	
				30				
15	Books published with details	Name of the	book	Publisher ISBN	r with	Yea	r of publication	
				11		202	3	
16	Date of Joining	25/10/2012						
17	Date of Retirement	-						
18	Type of association							
19	Permanent Faculty							
20	Adjunct Faculty							
21	Visiting faculty							

1	Name	Dr. Smita V	ishal K	atkar						
2	Date of Birth	06/12/1988	06/12/1988							
3	Unique ID	U-0010/249	U-0010/249							
4	Education Qualifications	MCA, Ph.D								
5	Work Experience	Teaching	Teaching Research Industry Others							
		12 years	12 years 9 Years							
6	Area of Specialization	Soft Comput	ting							
7	Courses taught	MCA, M.Sc		PGDDS						
8	Research guidance (Number of Students)									
9	No. of papers/Book	National	National International National International							
	Chapters published	Journals	Journ		Conferen	ces	Conferences			
		21 7								
10	Ph.D.	Completed			Ongoing					
11	Projects Carried out				1					
12	Patents (& Granted)	Filed			Granted					
	,	7								
13	Technology Transfer									
14	Research Publications	National	Inte	rnational	National		International			
		Journals	Jou	ırnals	Conferen	ces	Conferences			
			11							
15	Books published with details	Name of the	book	Publisher ISBN	with		r of lication			
						•				
16	Date of Joining	4 August 20	14							
17	Date of Retirement									
18	Type of association									
19	Permanent Faculty									
20	Adjunct Faculty									
21	Visiting faculty									

Date of Birth	3 4 5	Unique ID  Education Qualifications	Dr. Sheetal Sachin Gaikwad					
4 Education Qualifications  5 Work Experience  Teaching  Teaching  Research  Industry  Others  15 years  12 Years  6 Area of Specialization  7 Courses taught  MCA, M.Sc, BCA.  8 Research guidance (Number of Students)  9 No. of papers/Book Chapters published  National Journals  Teaching  Research  Industry  Others  Others  Industry  Others  Others  Industry  Others  Industry  Others  Industry  Others  Others  Others  Others  Others  Industry  Others  Industry  Others  Industry  Others  Others  Others  Others  Industry  Others  Industry  Others	<u>4</u> 5	Education Qualifications	01/03/1980					
5Work ExperienceTeachingResearchIndustryOthers15 years12 Years12 Years6Area of SpecializationMobile Adhoc Network7Courses taughtMCA,M.Sc, BCA.8Research guidance (Number of Students)9No. of papers/BookNational JournalsNational ConferencesInternational Conferences1232310Ph.D.CompletedOngoing11Projects Carried outFiledGranted12Patents (& Granted)FiledGranted13Technology Transfer14Research PublicationsNational JournalsInternational JournalsNational Conferences	5		50568					
5Work ExperienceTeachingResearchIndustryOthers15 years12 Years12 Years6Area of SpecializationMobile Adhoc Network7Courses taughtMCA,M.Sc, BCA.8Research guidance (Number of Students)9No. of papers/BookNational JournalsNational ConferencesInternational Conferences1232310Ph.D.CompletedOngoing11Projects Carried outFiledGranted12Patents (& Granted)FiledGranted13Technology Transfer14Research PublicationsNational JournalsInternational JournalsNational Conferences			MCA, Ph.D					
6 Area of Specialization 7 Courses taught MCA,M.Sc, BCA.  8 Research guidance (Number of Students) 9 No. of papers/Book Chapters published Chapters published  10 Ph.D. Completed Ongoing  11 Projects Carried out 12 Patents (& Granted) Filed 2  13 Technology Transfer 14 Research Publications Nobile Adhoc Network MCA,M.Sc, BCA.  National International National Conferences Conferences Conferences Conferences Conferences International National International National Conferences Conferences Conferences Conferences Conferences Conferences		1			earch	Industry		Others
Technology Transfer   Accounts taught   MCA,M.Sc, BCA.			15 years 12 Years		2 Years			
Research guidance (Number of Students)   National   International   Students	6	Area of Specialization	Mobile Adho	Mobile Adhoc Network				
No. of papers/Book Chapters published   National Journals   International Journals   Conferences   Conferences   12   3   23   23	7							
No. of papers/Book   Chapters published   National   Journals   Journals   Conferences   Conferences   Conferences   12   3   23   23   23   23   23   23	8	_						
10 Ph.D. Completed Ongoing  11 Projects Carried out  12 Patents (& Granted)  13 Technology Transfer  14 Research Publications  National Journals  12 Journals  12 International Conferences  Conferences	9	,	National	Interna	ational	National		International
11 Projects Carried out  12 Patents (& Granted)  13 Technology Transfer  14 Research Publications  National Journals  National Sournals  National Conferences  Conferences		Chapters published	Journals Journals		Conferences			
12 Patents (& Granted)  Filed  Conferences  Filed  Granted  Granted  International Journals  Filed  Diametric Structure Struct	10	Ph.D.	Completed		Ongoing			
12 Patents (& Granted)  Filed  Conferences  Filed  Granted  Granted  International Journals  Filed  Diametric Structure Struct	11	Projects Carried out						
13 Technology Transfer 14 Research Publications National Journals Journals National Conferences Conferences								
13 Technology Transfer 14 Research Publications National Journals International Conferences Conferences	12	Patents (& Granted)	Filed		Granted			
14 Research Publications National Journals International Journals Conferences Conferences			2					
14 Research Publications National Journals International Journals Conferences Conferences	12	Tashnalagy Transfer						
Journals Journals Conferences Conferences			National International		rnational	National		International
12	1.	Trescuron 1 donourons						
				12				
15 Books published with Name of the book Publisher with Year of	15	Books published with	Name of the 1	book	Publisher	with	Yea	ur of
details ISBN publication		_			ISBN			
1.Theory Pacific August-2022			-				Aug	gust-2022
			problems and		publication,ISBN- 978-93-92469-49-			
Solutions. 978-93-92409-49-7,			Solutions.			Z409-49-		
2. book-					,			
Synergistic ISBN: 2023							2023	
Interaction of Big 9781003279044				Big	97810032	79044		
Data with Cloud Computing Taylor and				ıtina	Taylor ar	nd		
for Industry 4.0 Francis Group			_	_	-			
3. Machine ISBN: 978-1-394- December 2023			3. Wacinite		ISBN: 978-1-394- 17334-1		December 2023	
Learning Wiley IEEE			Learning				1	
Applications: Dragge					Wiley – l	EEE		
Vision to Robotics			Applications:		•	IEEE		
16 Date of Joining 4 August 2018			Applications: From Compu	ter	•	EEE		
17 Date of Retirement	16	Date of Joining	Applications: From Compu Vision to Rob	ter ootics	•	EEE		

18	Type of association	
19	Permanent Faculty	
20	Adjunct Faculty	
21	Visiting faculty	

1	Name	Mr. Prasad Tulsidas Goyal						
2	Date of Birth	08/05/1985						
3	Unique ID	50310						
4	Education Qualifications	MCA, NET						
5	Work Experience	Teaching	Rese	earch	Industry		Others	
		14						
6	Area of Specialization	Machine Lea	rning \	Web Minii	ng			
7	Courses taught	MCA, M.Sc						
,	Courses taught	1,1011,111.50	Compu		<b>c</b> , <b>B</b> c 1 1			
8	Research guidance (Number of Students)							
9	No. of papers published	National	Interna	ational	National		International	
		Journals	Journa	als	Conference	ces	Conferences	
					2		2	
10	Ph.D.	Completed		Ongoing				
11	Projects Carried out							
12	Patents (& Granted)	Filed		Granted				
		Tiled						
13	Technology Transfer				-			
14	Research Publications	National	tional International		National		International	
		Journals	Jou	rnals	Conference	ces	Conferences	
15	Books published with details			Publisher			ear of blication	
				ISBN		puoi	ncation	
16	Date of Joining	07/07/2013						
17	Date of Retirement							
18	Type of association							
19	Permanent Faculty							
20	Adjunct Faculty							
21	Visiting faculty							

#### 8. Details of Research Laboratories & infrastructure

Total 180 computer nodes with internet connectivity.









# 9. Total No. of SET/NET qualified students

Total Number of Students Qualifying NET Exam=6 Total Number of Students Qualifying SLET Exam=8

#### 10. Details of MoUs and Linkages

- a. This Memorandum of Understanding ("MOU") is made on the 10th day of April, 2017 at Pune by and between Quick Heal Foundation, registered under Bombay Public Trusts Act 1950
- b. Centre for Advanced Computing(C-DAC), Pune (Scmientific Society of the MCIT, Govt. of India)
- c. Collaboration Agreement (Android Development with Kotlin Training), Google Asia PacificPte.Ltd.

#### 11. Extracurricular and Extension activities

#### **International Women's Day**



#### Fresher's Event 2023



# **Internship Fair 2022**





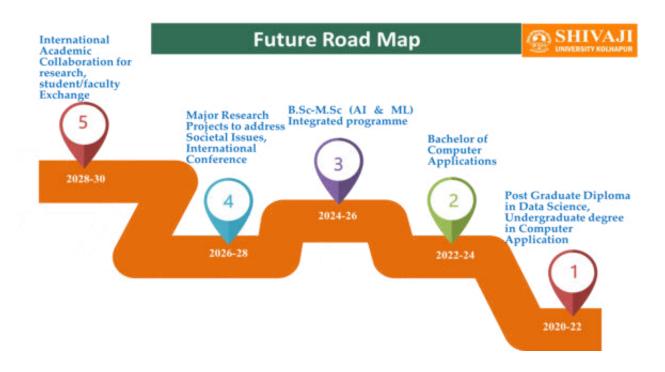


# 12. List of Distinguished Alumni

Sr No	Name	Designation	Company name
1	Aarti Kurkute	Software Developer	Visual Lease Edison, New Jersey, United States
2	Pratap Patil	Senior Consultant	CapgeminiVilla Park, Illinois, United States
3	Sumitra Gatade	Technical Design Authority	Vodafone UK,London, England, United Kingdom
4	Chandrashekhar Ambi	Software Test Specialist	Amdocs, Pune
5	Ravi Mali	Director	NeuroLogic Solutions, Pune
6	Sanjeev Chandne	Senior Software Engineer	IBM, Banglore
7	Anand Ukarande	Senior Software Engineer	Dell, Bangalore
8	Amit Rote	Lead iOS Developer	NSAmi San Jose, California
9	Ravindra Satpute	Solution architect	Zensar Technology, Pune
10	Sunny Chougule	Project Delivery Manager	Deloitte Sacramento, California, United States
11	Sandhya Shahaji	Software Engineer II	Microsoft one microsoft way
	Pawar		redmond wa 98052
12	Anil Gurav	Senior Leader	Zensar Technology, Pune
13	Nandkumar Joshi	Senior Software Engineer	Persistent Systems, Pune
14	Abhijeet Marathe	Senior Software Engineer	Persistent Systems, Pune
15	Mukesh Kamble	AccountArchitect	ISSQUARED, Inc. Pune, Maharashtra, India
16	Himmat Jadhav	Senior Account Manager	Persistent Systems Ltd., Pune
17	Laxman Gulawani	Founder, Principal Architect at Anar Solutions	AnAr Solutions Pvt. Ltd., Pune
18	Dhirajprasad Hanchanalkar	Senior Account Manager	Tech Mahindra, Pune
19	Sangram Barge	Director	Chankya Software, Pune
20	Mahesh Rajmane	Director	Netscout, Pune
21	Sameer Vijapure	Senior Software Designer	Persistent Systems, Pune
22	Abhijeet Joglekar	Senior Software Engineer	Persistent Systems, Pune
23	Madhukar Latane	Senior Leader	Zensar Technology, Pune

24	Nilesh Mahadik	Project Associate	Cognizant
			Pune, Maharashtra, India
25	Mr. Abhijeet Redekar	Statistical Officer	Shivaji University,Kolhapur
26	Sachin T.Zambre	Software Engineer	Kale Logistics Pvt.Ltd
27	Rekha S.Chavan	Software Engineer	Kale Logistics Pvt.Ltd
28	Asim F.Khan	Software Engineer	HCL Technologies Pvt.Ltd
29	Mayur Patil	Software Engineer	Vyom Lab,Pune
30	Rishikesh Ombase	Software Engineer	Eye,Mumbai.

#### 13. Future roadmap of the department



#### 14. Media coverage of the Department

'सणोत्सव व पाककृती' : शिवाजी विद्यापीठातील विद्यार्थिनीनी तयार केले बहुमोल माहितीपूर्ण 'ॲप'

# भारतीय खाद्यसंस्कृतीचे मोबाईलच्या माध्यमातून ज

लंक्स क्र कर्म

क्षेत्रपू: चले व्यान्तेन इस्त नर्दे पर सं, श्रीर व्यवस्था क्रांसा छोडोर ता र ऐसा तथा की वाँक रीर असे, राजुसा अफरवर्गात बाराय कर केन करें, पर, तालक प्राच्योगक जाग प्रवेश का मार्गक् हु तस औं, का नात सामानी ज्ञान जाती वर भा के। समान्य वर पेरीचे पीती

पुत्र के रोज कहा है के केन राजनोंड कर केवा तर्थ. सेव्हां चेवडीला प्रवेत परिचार्च केवेड वेहेन इतेज नवार्च बहेती जानेकार्य क्षेत्र पूर्व का तार्वाच्या विकार केरणांत्र त्य अर्था प्रति व प्रति प्रति प्रति क्षेत्र का वर्षे परिते विकार प्रति व प्रति क्षात्र का कारणा प्रति विकार प्रति विजे प्रति क्षात्र का कारणा प्रति ना दिवरी करती ने प्रथम अपना वेदार diffusion bit, one should also set

असे ऑपोट होते ऑप...

त्वा केरे को तकती कार सध्यापने का और है के offit and other than straight triples ते व विवर्धित का के बाद नहां । जाता का वा को व विवर्धित का के बाद नहां । जाता का वा को ते हूं जा तेज हैं का जा कृतिका । उत्तर कान जू प्रस्न कराका को कोंग्रेस कारों जो । जो सामा हामा बारमुका बात की पार्चर को है। व वीका कर व वॉर्ड कर वितेत हार्च व डोर्ड करों। केंग्र को के राज की को को डॉर्ड कर कर व किए को बात व वितर्वित कर केंद्र

ान, निर्मा पंताना विकास सामाना प्रधान आपरांचार प्रेम है सामा आहे. युग मां जोरूप्यामी मार्गिक मार्ग्य आहे. युग मां जोरूप्यामी मार्गिक मार्ग्य आहे. युग सामा क्षात्री प्रधान मार्ग्य, युग मार्गाम स्वामाना मार्ग्य को आहे. अलेर्ड मीर्ग मार्ग्य प्रधान पर्या को आहे. अलेर्ड मीर्ग मार्ग्य पर्या मार्ग्य मार्ग्य प्रधान प्रधान प्रधान मार्ग्य को मार्ग्य के अलाविकास प्रधान मार्ग्य स्था पर्या के प्रधानी प्रधान मार्ग्य स्था मार्ग्य के प्रधानी प्रधान मार्ग्य सामा आहे. साम्य आहे. साम्य आहे. साम्य आहे. १ साम्य आहे. साम्य आहे. प्रधान मार्ग्य अधिकास साम्या आहे. साम्य आहे. साम्य स्था बीजामी मार्ग्या साम्य आहे.

- घीना शिंदे

भीना जिले साल मा सकती हो। साल मा साहकती हो। साहकती हु। साहक

# जीवन एक स्ट्रगल

होरण आराज धरणायून प्राचनान्त्र्य । पहली. जीवन हे आंध्रम संभारिता आहे. या संभारीतृत्व भी बाहुन जी पूर्व नेतासका प्राचन कराती न्यासान्त्र आर्थ व्यासान्त्रा अर्थ न्यासार्थे. उत्पूर्णन तर मेलेक्ट आरोज्या रहणता, संध्यां हात जीवनाया गावा, प्रमापुत्रक मान्युत शीमान्य कंटी. न्यून विकटिंग जीवनान्त्रित्व अर्थक अञ्चयते वास्तुत्ता सामन्त्र जीवनान्त्रस्य अन्यस्य समाजान्त्रस्य वेत्रस्य तथा जारत्यासा. - प्रसीक्त साहृत्या तथा जारत्यासा.

## विद्यापीठ 'क्विक-हिल' यांच्यात सामंजस्य करार

कोल्हापूर, ता. १२ : शिवाजी



विद्यापीठाचा संगणकशास्त्र अधिविभाग व अग्रमानांकित **अँटीव्हायरस** कंपनी 'क्विक-

हिल' यांच्यात पुणे येथे सामंजस्य करार झाला. विद्यापीठातर्फे कुलसचिव डॉ. व्ही. डी. नांदवडेकर यांनी तर क्विक-हिलतर्फे मुख्य कार्यकारी अधिकारी कैलाश काटकर यांनी करारावर स्वाक्षरी केल्या. करारान्वये कॉम्प्युटर विद्यार्थ्यांना मोफत सायन्सच्या पान २ वर ≫





# आर्टिफिशियल इंटेलिजन्सला भारी डिमांड!

आरोग्य, शिक्षण, आपत्ती निवारणासाठी वरदान; रोजगराच्या असंख्य संघी

बोल्ह्यु: प्रवीप सके वित्र-श्वासम्ब प्रतिहो होम इदिना (अर्टिमीयन इतिस्म) हा बांका वर्षना समा विश्व सन्त वहें, शरोपनेव, विश विव असे निवार वसराव शेवंत्रको 'एवर' बरदान रात अहे.



मार्था औ सन, श्रीन और दिस प्रशेती जारेंग बेला का आहे. निवेश व वेण अंतरवारणी हेत्या रोकंच देवत तसीर गुराण सम्पर्ध जामंत्र हो.

'राम' को राज्य वर्गिता अंस्कृती देश गाने, 'दशा' मार्थक्य प्रकार

क्या चेतिके क्षेत्र

स वर्ष कार्य क्षेत्र एका संदेशको गाँ को गत नेवंदर मित संक्त विवर्ध factor is about एका विकास कर बारे, बारानुसा स्पतस्य सार्थाः सर्व र्व कीत शेष्ट विभारतम्ब संगमसान from front feath.

र्शन र्यट्राल केला

print July Stanta देवने विशेषण सम्पन्नती पार वेक्नेकं २०१८ हेरी पैकर्ट डेक्सक्ट केंग्र प्र रंग सहस्रते एव साम विकारी व देंद्र सामार्थ म्यामा बेली जो. यनगर-विशेष गर्मना विद्यापेट संतम स्रोतराज्ञ, संगती व सत्तर जिल्ह्यातित lides you due liste क्ष मानिवारणं ए. एत्ते. अर्थत व एसीए व पेते सर जिल्हा हो सने विनोग प्र देश बान अधारकोचा राज्यास विकारी और रोजवारी 'रहा' व किए किस्टर का और पानने की दरन रेखं, नेवल लेखे प्रोतील, परित लीने पांच वर्ष राज्यके प्रवार





भीतस्त्रते 'स्टान्डीस' ह मानावांती उत्कर शंद्रधार गेंद्र मेदी शंचा गर्वकातानी २८ वर्टक २०१४ होती सुर बेला. य अञ्चलमुखे वेट मरोठी गुंतरम्ब पातार मंद्रा प्रकास रोगा अहे

य रखनाच मुख्य होत हा "रेकार्डर्निते" व बार्डन अर्थन्यक्त्येच्य २५ क्षेत्रंत्रने "ब्रीजन्य विकतित करों " हा आहे. त्याचकोक उच्च गुरवात व क्योत क्यों प्रशंकाराका चीराम प गेरीकरेखीत भारेच्या आतेता आहे. य रखमान्द्रे अस्ति पुंतरपुर अवस्ति होतेन, उसेर राजिक गंतरणकरेखील होतेल. जारी अस अरे "बीर-बेरीडे" व अर्थीकर अधित कंपनी से मेरीन विकास केले जरे स राक्षम पर काण्यासर्थ विविध देशवेता प्रदेशी गुंतबगुकीकोल निर्वय विश्विल करण्यात हाते. त्याचकोक विकेष समान्यांचे को भोरतीन जराम सन देग्यत असे, तसेव प्रधानसंबं मूत ३ वर्गनीत सहवित्यत असी. विवेध निका व प्रक्रिया करेखील विभिन्न \$790 APR

श्रीपाट २०१४ मध्ये बेद्रीय मीत्रमंडळले ४९ दक्के परेशी गुंचगुरू संत्रण केंग्रा त्याचकोज. १०० टरने नुंखन्त ही रेखेच्या प्रयापुर नुविश्रमधे सम्बन्ध सन्वत दिले. हो एक यहर्त निर्मत होता. यहर्वी अग्राज्यानची गुंतरमृक सम्बन्ध रूप देखात आती नवाती. सर्देख २०१४



बंगकी शेक्टिम उससे परात तथ करणासरी बेद साकाकडे राखत केले आहेत.

मैक इन इंडिया मध्ये ऑटेमोबर्डन, र्वेटेमोबर्धन परम, तर्वा, वैविक रंखान, सावन, बंधकान, संश्रम उत्परने, विद्वा जबले, लेक्ट्रॉनिस सिरंग, अन्यक्रिय, मार्थित नंतराम व स्टीम प्रदेश स्वसम्बद्धाः बाराडी ट्यांग, मोरंगर, खाण, तेल व वार, और वंदे व द्याराज्य केने अन्य पत्र रते वन्यानां, अवस्ता वक्तवेद्रोत, श्रीनिक डर्व, परंत्र व अवस्तित, अरोग वेशमधे १०० टक्के गुंचगुर्कीन प्राचनी देग्याः अली आं. अन्यात संक्षा आणि सम्बन्ध र देवत स्वीत ज्ञापा के संत्री गुंक्यूक करणा बर्जा देवार जाते. य त्यक्रमचा पण महरू मारत् रासको मेंनेटिक मारत् व उत्क्रमोर्जन १३ फेक्समें २०१६ रोजी 'मेन इन डॉरिंग' सन्तर मंब्रं के अवंदित सम्पत्त राज्य प्रकार विविध केवर्तात २,५०० आंत्रस्टीय व ८,००० रहीत कंत्र-वर्ति सहयान गोदाला, स्तेत ६८ देशांते विद्यांडत व ४५ क्रिक्स उद्योगातिको याने र्वेदमी केली. न्यास्त्र १५,२ लाख कोटी नृत्रामुख

करणाचे गारं

करेती है पाता जो व वसते में इ राह्मास एक त राजनरेखी in si n EK BOTON S नेपेर्मुका मु आता आहे. व राक्ष्ममञ्जे रा मायबर का अन्त अहे. वसंत \$5450 PM स्वास रोकेन STEED EST रंग्येत र धर



# विद्यारयानीच केले संशोधन : गैरहजर राहिल्यास पालकांच्या मोबार्डलवर मेसेज

firmati firmsta

# विद्यापीठातील विद्यार्थ्यांची हजेरी वायरलेस यंत्रावर

इदीव स्टि ः कोलाम्

विद्याचीर मतावा प्रत्येक संस्थाना विकासीची हरेगी चेतनी जाते. वासाठी हरेगोपसक तयार करने, ताव अभिन विद्यवीचा सह ग्रेमें, ते पतक वर्षना जपून देवाने वा चोरी सूप क्रियक्ट व वेबसाऊ आहेत. या पदलेला अधूनिकांची जोर रेज विकासी विकारीमधील विकार्यांने 'चयलेस हरेंगे वंब' पर्नाको अहे.

विभागतील एवं. एस्त्री, द्वितीय

• अंकृतिको स्टारंकीयः • रेटावेस वेद्याना • marks di • रेवर्डरीय पेरेड

पानकांन पर्द्वात ♦ अयुक होती

• विक्रमा तकत वेते. • ३०० फुटांगर्वतः यः • गोवर्वतः वैद्योगनाने हे •

प्रमानीय क्या करता की वर्त करता हो। अगणकाल विकासीन विद्यार्थीन • वलदार्थ वदा

शरे य प्रणानीको हर्वेरीयका होगाया sta fisacia प्राच दरगर गरे

-प्र. क्वीर शरो, तका केलेले कवालेन इमेरी केंद्र संगठराज्य दिनाग

ि विकायां विकाय

कार्य निर्मित कर्न

कोर पेजन जारीन, कोरीन विकारी क पंताब क्रावेपी प्रकारो हों। नार्वन, तेस्य संस्थानंत प्राचापक है के शाहित पर देखेल एकाद विद्यार्थी पेत्रक अपेन त याच्य पानकांचा योवाईनक तुमय पान संबंधित तसाता पेड्स बहे,' हा पेतेकी पर्वतन्त्राची महिता स क्षेत्र आहे.

क्रमा विकासीची प्रतेष वर्षत विकास औरका समार, परिचानमें 'वासतेन अदिन्य ता विकासी वह होते इसके लेक्सची होती बागाइक नहीं चेजन पंतर्न को, मही विद्यवे नेरपान मिरीम पहाले, अञ्चय होनी या. जिस्टीम है यंत्र तथा हैनो आहे. हे. वर्षणी संगणकान्य मेंद्र हैन्द्री सामग्र विद्यार्थीने हा सकी हरते कामा संगानको बोहने पेने आहे. तका आहे, हे के हरके व नहत सम्मयने र कात याच सही करीत असन्याचे गर्नदर्गनकाले मुन्ते तीन प्रतिकविकार्याचीति से वेदन प्रध्यक्त अपन्य लेक्सल है के

### Soon, city to house cyber security resource centre

Provid Bloom: TNN Updated: Nov 15, 2018, 12:52 IST

The building is expected to come up in a year

KOLHAPUR: The country's first National Resource Centre in Cyber Security and Data Sciences will be housed at Shivaji University, Kolhapur (SUK), Training will be government and the corporate sectors, and this trained manpower would also offer cyber sufety sude; said RK Kanan, Director, Internal Quality Assurance Cell (QQAC) Kannat said transing will be given under the Pandit Madan Mohan Malariya National Massion on Teachers and Teaching (PMMNOMTT) scheme and subjects like cylcovered.

"The first batch of the cyber security course will start from November 26. A special web portal has been developed for this. We have got a good response initially, as all training. Kamat said.

The resource centre will be useful for offering cyber security and safety asolit to government and corporate offices. Kannat said. In September, a presentation regarding ministry of human resources development, Kannat said.

These are many cyber security breaches we can winess in our duly lives and our centre will help in making sure these get noticed by the laymen as well as profession and in the knowledge on how to overcome these. It will be useful particularly for agriculture, defence, education, and industries sector," Kansat said

"An amount of Ro? core has been granted by the HRD ministry and depending on the work, it will be allotted in installments," he said, adding that Shivan University construction of the resource centre and a nod is expected for this at the next management council meeting. The building is expected to come up in a year. Vice-chancell prove a milestone for SUK as it would be the first centre of its kind in the country - several universities were in the race for this, he said.

#### झाडांना मिळणार गरजेनुसार पाणी

मोबाईल ॲप विकसित : शिवामी वि

असे आहे अँप

Polyago Villar Polya No. 6 May 25, 2015 Polyadol N. May 25, 2015