



SVKM's
Shri Vile Parle Kelavani Mandal's



SHRI BHAGUBHAI MAFATLAL POLYTECHNIC

Vile Parle (West), Mumbai-400 056

Department of COMPUTER ENGINEERING

Three Years Full Time Diploma

In
COMPUTER ENGINEERING

CURRICULUM
Semester Pattern
(Effective from June 2023)



BSQ

HEAD,

Department of Computer Engineering,
Shri Bhagubhai Mafatlal Polytechnic,
Iris, Nattkar Ram Ganesh Gadkari Marg,
Vile Parle (W), Mumbai - 400 056



[Signature]

PRINCIPAL

**SHRI BHAGUBHAI MAFATLAL POLYTECHNIC
AND COLLEGE OF ENGINEERING
VILE PARLE (WEST), MUMBAI- 400 056.**



Shri Vile-Parle Kelavani Mandal's
Shri Bhagubhai Mafatlal Polytechnic
Mumbai-400056



(AN ACADEMICALLY AUTONOMOUS GRANT-IN AID INSTITUTE)

CURRICULUM 2023

(NEP-2020 Based)

DIPLOMA PROGRAMME

IN

COMPUTER ENGINEERING

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	Course Code Course Name	
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PREFACE

SHRI BHAGUBHAI MAFATLAL POLYTECHNIC started three years diploma programs and was affiliated to the Board of Technical Examinations, Maharashtra State, in 1963. The institute has been conferred an academic autonomous status since 1969 by Government of Maharashtra because of excellent performance, which enabled it to design the curriculum and examination scheme and to introduce inplant training, which involved industry-institute interaction. Thus, four years semester sandwich pattern came into existence. Since 1978-79, academic freedom was extended to all the full-time diploma programs. In 1989-90 full autonomy was granted to all the seven full-time diploma programs.

As a further development to the above, the Multi Point Entry and Credit System (MPECS) was initiated in 1981 on progressive basis. In this scheme students can regulate their pace of studies within the rules prescribed.

From 1993-94, full academic autonomy was extended to all the nineteen programs, which includes full-time diploma, part-time diploma and post-diploma programs. The students have to qualify for appearing in the final examinations as per details given in the MPECS rules. The examinations are conducted by the institute and the final diploma is awarded by the institute at the convocation function.

From the academic year 2016-17, our curriculum is revised and is converted to three-year diploma program.

Teaching learning is done at the institute up to V semester and inplant training is offered at VI semester.

To incorporate the latest developments in technology and to have better industry institute interaction, the curriculum is revised again to be implemented from the academic year 2019-2020. This is a diploma program of three-year duration with inplant training in fifth semester.

The vision of the institute is to be a premier technical training and development institute catering to the skill and professional development in multi-domain for successful employment / selfemployment by offering need based curriculum and state of the art infrastructure. The institute shall be the center for excellence in skill development and community development through different training programmes, incubation centre and entrepreneurship development. For this the institute is committed to provide education for skill development, engineering diploma and continuing education programmes for enhancement of employability skills of the aspirants in the job/self-employment through continually developing quality learning systems. The institute aims at holistic and student centric education in collaboration with industry and having practice based education. To achieve this continuous efforts are made to design the curriculum considering the latest development in the industrial sector and technology.

The Course is Three Years Full Time Diploma in Computer Engineering (Un-aided) with summer in plant training having Multipoint Entry & Credit System. The emphasis of the course is on Computer Education at a Technician Level covering Knowledge and practical skill sets of system Software, Programming Languages, Database system and administration, Web Technologies, Net Work administration, Hardware along with basic Sciences and engineering Courses - Mathematics, Physics, Electronics and Electrical Engineering. The Curriculum also focuses on developing soft skills such as communication skills and life skills. Considering the need of cutting edge, courses like IoT, Computer Gaming, Ethical Hacking, Mobile application development and cloud computing.

Full Time Diploma in Computer Engineering Course is approved by All India Council For Technical Education (AICTE) vide file no. 740-89-124(E)/RC/95 and by Department of Higher and Technical Education, Government of Maharashtra vide PTI 202K/331/2000) / TE-2. The Course is approved by AICTE vide their reference each F. No. 740-89-007/E/RC/95/TME-1963 dated :13/08/2004. The approval of equivalence to Diploma is granted by Maharashtra State Board of RI BH Technical Education on regular interval.

INPLANT TRAINING (Under AEDP scheme)

Students receive institutional training for the first five semesters. In sixth semester, to gain practical knowledge and industrial exposure, the students have to undergo inplant training. This scheme enables the students to enhance their psychomotor skills during the industrial training. The training also helps the student to better understand the different application-oriented courses and project covered in fifth semester.

In this Curriculum the student has to acquire 121 credits for successful completion of Diploma Programme. The courses of curriculum are structured at 4 different levels i.e. Basic Courses, Core Courses, Application Courses, and Management Courses.

The minimum entry level is 10th. However, the curriculum provides “Choice and Credit based (CCBS)” for the students opting admission after passing 12th, ITI, MCVC. At higher entry level, the students will get exemptions in certain courses as per the rules.

There is a flexibility for opting the courses as per the choice of students. The curriculum provides “Sample Path” as a guide line for selection of courses in each term for entry level as 10th. The List of Courses for Award of Class after completion of Diploma Programme is prescribed separately in this curriculum.

The fulfilment of programme outcome as stated in this Curriculum will depend on its effective implementation. The teachers who are implementing the curriculum were also involved in the design process of curriculum, hence, I hope that this Curriculum will be implemented in effective way and the pass outs will acquire the requisite knowledge and skills to satisfy the industrial needs.

(Dr. M.Z.SHAIKH)

Principal

Shri Bhagubhai Mafatlal Polytechnic, Mumbai



Shri Vile-Parle Kelavani Mandal's
Shri Bhagubhai Mafatlal Polytechnic



Institute Vision and Mission

VISION

SBM Polytechnic aspires to be the Lead Institute in providing need based Technical Education.

MISSION

- 1 To provide state of art infrastructure and latest equipment for providing a stimulating learning environment.
- 2 To prepare students to meet the dynamic needs of the industry by periodic reviewing and up gradation of curriculum through an interactive process with industry.
- 3 To inculcate a spirit of excellence in terms of academic performance, research and innovation in faculty by providing appropriate support and incentive systems.
- 4 To promote and support Co-Curricular, extra-curricular activities and industry interaction to make students socially sensitive and employable.

COMPUTER ENGINEERING DEPARTMENT

VISION

Create a sustainable academic environment to produce highly competent computer professionals of the future

MISSION

- M1.** To expose students to latest tools and technologies in computing.
- M2.** To foster the professional development of students by providing excellence in education.
- M3.** To Adapt to rapid advancements in computing by engaging students in the lifelong learning.
- M4.** To inculcate sound ethical, moral and social values amongst students for benefit of the society

JOB PROFILE OF COMPUTER ENGINEERING (CSE) DIPLOMA PASSOUTS

This Outcome Based Education.

(OBE) curriculum based on NEP 2023 will fulfil the requirements of all the stakeholders through effective implementation and satisfy the industrial and academic need of the students. Student with Diploma in (CSE) will get good opportunities to carry out various activities in areas like

- **Software Development and Maintenance:** Engaging in the full software development life cycle, including coding, debugging, and testing applications.
- **Infrastructure and Network Management:** Setting up and managing secure IT environments.
- **Database Administration and Data Analytics:** Managing organized data systems to ensure accessibility and security.
- **Web Technologies and Digital Presence:** Designing and deploying responsive websites and web applications.
- **Technical Sales and Field Support:** Acting as a bridge between technical products and end-users.

After successful completion of Diploma Programme in CSE, students can work as

- Software Testing & Quality Assurance (QA) Engineer
- Hardware and Embedded Systems Technician
- Junior Cloud Operations Assistant
- Cybersecurity Support Analyst
- Technical Content or Instructional Designer
- Computer Lab or IT Workshop Instructor
- Freelance UI/UX Designer
- IoT (Internet of Things) Specialist
- ERP (Enterprise Resource Planning) Support
- Digital Marketing Technical Assistant

DIPLOMA PROGRAMME IN COMPUTER ENGINEERING

RATIONALE

The Diploma in Computer Engineering aims to produce skilled mid-level professionals capable of maintaining hardware, developing software, and managing network infrastructures. It bridges the gap between academic theory and industrial application by focusing on hands-on technical competencies and problem-solving. The programme ensures students are "industry-ready" to meet the growing global demand for IT support, system administration, and digital security. Ultimately, it provides a versatile foundation for immediate employment, entrepreneurship, or further specialized higher education.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

- PEO1.** Able to identify, frame and solve computing problems by applying their knowledge in Computer engineering.
- PEO2.** Promote lifelong learning by integrating academic knowledge and practical applications.
- PEO3.** Depict effective team work and practical skills for holistic development.

PROGRAMME OUTCOMES (POs)

On successful completion of Diploma Programme in CSE the pass outs will be able to,

- 1. Basic and Discipline specific knowledge:** Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.
- 2. Problem analysis:** Identify and analyse well-defined engineering problems using codified standard methods.
- 3. Design/ development of solutions:** Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.
- 4. Engineering Tools, Experimentation and Testing:** Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.
- 5. Engineering practices for society, sustainability and environment:** Apply appropriate technology in context of society, sustainability, environment and ethical practices.
- 6. Project Management:** Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.
- 7. Life-long learning:** Ability to analyse individual needs and engage in updating in the context of technological changes.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

On successful completion of Diploma Programme in CSE, the student will be able

- PSO1:** Demonstrate the fundamental knowledge in the areas of Operating system, Web Technology, Microprocessor based system and IOT by applying programming skills and developing applications.
- PSO2:** Administer and manage Open source, Networking, Security and Database domains to enhance student growth.

MAPPING OF MISSION AND PROGRAMME EDUCATIONAL OBJECTIVES

Sr. No.	Mission	Component of Mission Statement	PEO/s
1	M1	To expose students to latest tools and technologies in computing.	PEO1,2,3
2	M2	To foster the professional development of students by providing excellence in education.	PEO1,2,3
3	M3	To Adapt to rapid advancements in computing by engaging students in the lifelong learning.	PEO1,2,3
4	M4	To inculcate sound ethical, moral and social values amongst students for benefit of the society	PEO1,2,3

MAPPING OF PROGRAMME EDUCATIONAL OBJECTIVES AND PROGRAMME OUTCOMES

Sr. No.	Programme Educational Objectives (PEOs)	Programme Outcomes (POs)
PEO1	Able to identify, frame and solve computing problems by applying their knowledge in Computer engineering.	PO1,PO2,PO3,PO4,PO7
PEO2	Promote lifelong learning by integrating academic knowledge and practical applications.	PO1,PO2,PO3,PO4,PO7
PEO3	Depict effective team work and practical skills for holistic development.	PO3,PO4,PO5,PO6

MAPPING OF PROGRAMME SPECIFIC OUTCOMES AND PROGRAMME OUTCOMES

Sr. No.	Programme Specific Outcomes (PSOs)	Programme Outcomes (POs)
1	Demonstrate the fundamental knowledge in the areas of Operating system, Web Technology, Microprocessor based system And IOT by applying programming skills and developing applications.	PO1,PO2,PO3,PO4,PO5,PO6, PO7
2	Administer and manage Open source, Networking, Security and Database domains to enhance student growth.	PO1,PO2,PO3,PO4,PO5,PO6, PO7

MAPPING OF PROGRAMME OUTCOME AND COURSES

POs No.	Program Outcome (POs)	Course Name
1	Basic and Discipline specific knowledge: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.	All courses mentioned in the scheme

2	Problem analysis: Identify and analyse well-defined engineering problems using codified standard methods	EMT238901, ASC238902, CMS238903, FCS238905, UHV238906, WSD238907, AMT238908, EVS238909, CWP230801, BEX238911, PRC238912, FCN230802, FSL230803, PRJ238913, DST238914, EUP230804, DBS238915, FMP230805, OSY238916, PRP230808, CSY230809, ADB230810, IOT238918, NWA238919, PSP230811, FLG230813, DIM238927, CSA238930, MLT230811, PRO230812, SDM230813, FSD230814, BSA230815, BCT230816, EDS230817, IPT230818
3	Design/ development of solutions: Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.	EMT238901, ASC238902, CMS238903, ENG238904, WSD238907, AMT238908, EVS238909, CWP230801, BEX238911, PRC238912, FCN230802, FSL230803, PRJ238913, DST238914, EUP230804, DBS238915, FMP230805, OSY238916, PRP230808, CSY230809, ADB230810, IOT238918, NWA238919, PSP230811, FLG230813, DIM238927, CSA238930, MLT230811, PRO230812, SDM230813, FSD230814, BSA230815, BCT230816, EDS230817, IPT230818
4	Engineering Tools, Experimentation and Testing: Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.	EMT238901, ASC238902, CMS238903, ENG238904, FCS238905, AMT238908, CWP230801, BEX238911, PRC238912, FCN230802, FSL230803, PRJ238913, DST238914, EUP230804, DBS238915, FMP230805, OSY238916, PRP230808, CSY230809, ADB230810, IOT238918, NWA238919, PSP230811, FLG230813, DIM238927, CSA238930, MLT230811, PRO230812, SDM230813, FSD230814, BSA230815, BCT230816, EDS230817, IPT230818
5	Engineering practices for society, sustainability and environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices.	EMT238901, UHV238906, AMT238908, EVS238909, CWP230801, FMP230805, LXL230806, PRP230808, CSY230809, IOT238918, PSP230811, FLG230813, DIM238927, CSA238930, MLT230811, PRO230812, SDM230813, FSD230814, BSA230815, BCT230816, EDS230817, IPT230818
6	Project Management: Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.	EMT238901, CMS238903, UHV238906, WSD238907, AMT238908, EVS238909, CWP230801, FMP230805, LXL230806, PRP230808, CSY230809, PSP230811, FLG230813, DIM238927, CSA238930, MLT230811, PRO230812, SDM230813, FSD230814, BSA230815, BCT230816, EDS230817, IPT230818
7	Life-long learning: Ability to analyse individual needs and engage in updating in the context of technological changes.	EMT238901, CMS238903, ENG238904, FCS238905, UHV238906, WSD238907, AMT238908, EVS238909, CWP230801, BEX238911, PRC238912, FCN230802, PRJ238913, FMP230805, LXL230806, OSY238916, PRP230808, CSY230809, ADB230810, NWA238919, PSP230811, FLG230813, DIM238927, CSA238930, MLT230811, PRO230812, SDM230813, FSD230814, BSA230815, BCT230816, EDS230817, IPT230818

PROGRAMME: DIPLOMA IN COMPUTER ENGINEERING SAMPLE PATH
ENTRY LEVEL 10+

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Shri Vile Parle Kelavani Mandal's
SHRI BHAGUBHAI MAFATLAL POLYTECHNIC

Learning and Assessment Scheme for Post S.S.C Diploma Programs

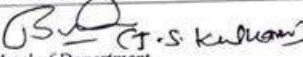
Program Name	: Diploma In Computer Engineering		
Programme Code	: CSE	With Effect From Academic Year	: 2023-24
Duration Of Programme	: 6 Semester	Duration	: 16 WEEKS
Semester	: I	Scheme	: 2023

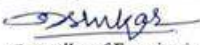
Sr No	Course Title & Code	Course Category	IKS (Hrs)	Learning Scheme					Credits	Assessment Scheme								
				Actual Contact Hrs./Week			Self-Learning (SL) ¹ (Term Work + Assignment) (Hrs)	Notional Learning Hrs /Week		Paper Duration (Hrs.)	Theory (Marks)			Based on LL & TL			Based on Self Learning	Total Marks
				CL	TL	LL					FA-TH	SA-TH	Total	FA-PR	SA-PR	SA-OR		
																	SLA (Marks)	
1	Engineering Mathematics (EMT238901)	AEC	06	3	2	-	1	6	3	3	30	70	100	25	-	-	25	150
2	Applied Science (ASC238902)	DSC	04	3	-	2	1	6	3	1.5	30	70@	100	25	25	-	25	175
3	Communication Skills (CMS238903)	AEC	00	3	1	-	2	6	3	3	30	70	100	50	-	-	25	175
4	Engineering Graphics (ENG238904)	DSC	02	2	-	2	-	4	2	-	-	-	-	50	-	-	-	50
5	Fundamentals of Computing System (FCS238905)	SEC	00	2	-	2	2	6	3	-	-	-	-	25	50	-	25	100
6	Universal Human Values (UHV238906)	VEC	01	2	1	-	1	4	2	-	-	-	-	25	-	-	25	50
7	Website Designing (WSD238907)	SEC	00	2	-	4	2	8	4	3	30	70	100	25	25	-	25	175
Total			13	17	4	10	09	40	20	No. of Papers=04	120	280	400	225	100	-	150	875

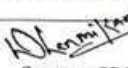
Abbreviations : IKS - Indian Knowledge System ,CL- Classroom Learning , TL- Tutorial Learning, LL-Laboratory Learning, FA - Formative Assessment, SA -Summative Assessment, SLA - Self Learning Assessment, TH-Theory, PR- Practical, OR-Oral **Legends :** @ Online Examination-

Note :

1. FA-TH represents average of two class tests of 30 marks each conducted during the semester.
 2. If candidate is not securing minimum passing marks in FA-PR of any course then the candidate shall be declared as "Detained" in that semester.
 3. If candidate is not securing minimum passing marks in SLA of any course then the candidate shall be declared as fail and will have to repeat and resubmit SLA work.
 4. Notional Learning hours for the semester are (CL+TL+LL+SL)Hrs. x 15 Weeks
 5. 1 credit is equivalent to 30 Notional Hrs.
 6. ^ Self learning hours shall not be reflected in the Time Table.
 7. SA-PR,SA-OR: Assessed by Internal and External Examiners Jointly FA-PR, SLA: Assessed by Internal Examiner Only
- Course Category :** Discipline Specific Course Core (DSC) : 2, Discipline Specific Elective (DSE) : 0, Value Education Course (VEC) : 1, Intern./Apprenti./Project/Community (INP) : 0, Ability Enhancement Course (AEC) : 2, Skill Enhancement Course (SEC) : 2, Generic Elective (GE) : 0


Head of Department


Controller of Examination


Secretary CDC




Principal

Shri Vile Parle Kelavani Mandal's
SHRI BHAGUBHAI MAFATLAL POLYTECHNIC

Learning and Assessment Scheme for Post S.S.C Diploma Programs

Program Name	: Diploma In Computer Engineering		
Programme Code	: CSE	With Effect From Academic Year	: 2023-24
Duration Of Programme	: 6 Semester	Duration	: 16 WEEKS
Semester	: II	Scheme	: 2023

Sr No	Course Title & Code	Course Category	IKS (Hrs)	Learning Scheme					Credits	Assessment Scheme									
				Actual Contact Hrs./Week			Self-Learning (SL) (Term Work + Assignment) (Hrs)	Notional Learning Hrs./Week		Paper Duration (Hrs.)	Theory (Marks)			Based on LL & TL			Based on Self Learning	Total Marks	
				CL	TL	LL					FA-TH	SA-TH	Total	FA-PR	SA-PR	SA-OR			SLA (Marks)
1	Applied Mathematics (AMT238908)	AEC	02	3	2	-	1	6	3	3	30	70	100	-	-	-	25	125	
2	Environmental Studies (EVS238909)	VEC	00	2	-	-	-	2	1	-	-	-	-	25	-	-	-	25	
3	Workshop & Practices (CWP230801)	SEC	01	-	-	2	-	2	1	-	-	-	-	25	-	-	-	25	
4	Basic Electronics (BEX238911)	DSC	01	3	-	2	1	6	3	3	30	70	100	25	25	-	25	175	
5	Programming in C (PRC238912)	SEC	02	2	-	4	2	8	4	3	30	70	100	25	25	-	25	175	
6	Fundamentals of Computer Network (FCN230802)	DSC	01	4	-	2	2	8	4	3	30	70	100	25	-	25	25	175	
7	Fundamentals of Scripting Language (FSL230803)	SEC	00	2	-	4	2	8	4	3	30	70	100	25	25	-	25	175	
Total			07	16	02	14	08	40	20	No. of Papers=05	150	350	500	150	75	25	125	875	

Abbreviations : IKS - Indian Knowledge System, CL- Classroom Learning, TL- Tutorial Learning, LL-Laboratory Learning, FA - Formative Assessment, SA - Summative Assessment, SLA - Self Learning Assessment, TH-Theory, PR- Practical, OR-Oral **Legends :** @ Online Examination-

Note :

1. FA-TH represents average of two class tests of 30 marks each conducted during the semester.
 2. If candidate is not securing minimum passing marks in FA-PR of any course then the candidate shall be declared as "Detained" in that semester.
 3. If candidate is not securing minimum passing marks in SLA of any course then the candidate shall be declared as fail and will have to repeat and resubmit SLA work.
 4. Notional Learning hours for the semester are (CL+TL+LL+SL)Hrs. x 15 Weeks
 5. 1 credit is equivalent to 30 Notional Hrs.
 6. ^ Self learning hours shall not be reflected in the Time Table.
 7. SA-PR,SA-OR: Assessed by Internal and External Examiners Jointly FA-PR, SLA: Assessed by Internal Examiner Only
- Course Category :** Discipline Specific Course Core (DSC) : 2, Discipline Specific Elective (DSE) : 0, Value Education Course (VEC) : 1, Intern./Apprenti./Project Community (INP) : 0, Ability Enhancement Course (AEC) : 1, Skill Enhancement Course (SEC) : 3, Generic Elective (GE) : 0

Head of Department

Controller of Examination

Secretary CDC



Principal

Shri Vile Parle Kelavani Mandal's
SHRI BHAGUBHAI MAFATLAL POLYTECHNIC

Learning and Assessment Scheme for Post S.S.C Diploma Programs

Program Name		Diploma In Computer Engineering																		
Programme Code		CSE							With Effect From Academic Year		: 2023-24									
Duration Of Programme		: 6 Semester							Duration		: 16 WEEKS									
Semester		: III							Scheme		: 2023									
Sr No	Course Title & Code	Course Category	IKS (Hrs)	Learning Scheme					Credits	Assessment Scheme										Total Marks
				Actual Contact Hrs./Week			Self-Learning (SL*) (Term Work + Assignment) (Hrs)	Notional Learning Hrs./Week		Paper Duration (Hrs.)	Theory (Marks)			Based on LL & TL			Based on Self Learning			
				CL	TL	LL					FA-TH	SA-TH	Total	FA-PR	SA-PR	SA-OR		SLA (Marks)		
1	Social & Life Skills (SLS238910)	VEC	-	-	-	-	02	02	01	-	-	-	-	-	-	-	25	25		
2	Programming in JAVA (PRJ238913)	AEC	-	02	-	04	02	08	04	03	30	70	100	25	25	-	25	175		
3	Data Structure (DST238914)	DSC	-	04	-	02	-	06	03	03	30	70	100	25	25	-	-	150		
4	Event Driven & UI Programming (EUP230804)	DSC	-	02	-	04	02	08	04	-	-	-	-	50	50	-	25	125		
5	Database Management System (DBS238915)	DSC	-	04	-	02	-	06	03	03	30	70	100	25	25	-	-	150		
6	Fundamentals of Microprocessor (FMP230805)	AEC	-	04	-	02	-	06	03	03	30	70	100	25	25	-	-	150		
7	Linux Lab (LXL230806)	DSC	-	-	-	02	02	04	02	-	-	-	-	25	-	25	25	75		
Total			-	16	-	16	08	40	20	Total Papers=04	120	280	400	175	150	25	100	850		

Abbreviations : IKS - Indian Knowledge System, CL- Classroom Learning , TL- Tutorial Learning, LL-Laboratory Learning, FA - Formative Assessment, SA -Summative Assessment, SLA - Self Learning Assessment, TH-Theory, PR-Practical, OR-Oral **Legends :** @ Online Examination-

Note :

1. FA-TH represents average of two class tests of 30 marks each conducted during the semester.

2. If candidate is not securing minimum passing marks in FA-PR of any course then the candidate shall be declared as "Detained" in that semester.

3. If candidate is not securing minimum passing marks in SLA of any course then the candidate shall be declared as fail and will have to repeat and resubmit SLA work.

4. Notional Learning hours for the semester are (CL+TL+LL+SL)Hrs. x 15 Weeks

5. 1 credit is equivalent to 30 Notional Hrs.

6. ^ Self learning hours shall not be reflected in the Time Table.

7. SA-PR,SA-OR: Assessed by Internal and External Examiners Jointly FA-PR, SLA: Assessed by Internal Examiner Only

Course Category : Discipline Specific Course Core (DSC) : 4, Discipline Specific Elective (DSE) : 0, Value Education Course (VEC) : 1, Intern./Apprenti./Project./Community (INP) : 0, Ability Enhancement Course (AEC) : 2, Skill Enhancement Course (SEC) : 0, Generic Elective (GE) : 0

Abbreviations : IKS - Indian Knowledge System, CL- Classroom Learning, TL- Tutorial Learning, LL-Laboratory Learning, FA - Formative Assessment, SA -Summative Assessment, SLA - Self Learning Assessment, TH-Theory, PR- Practical, OR-Oral **Legends :** @ Online Examination-

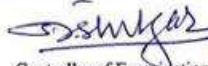
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Course Category : Discipline Specific Course Core (DSC) : 4, Discipline Specific Elective (DSE) : 0, Value Education Course (VEC) : 1, Intern./Apprenti./Project/Community (INP) : 0, Ability Enhancement Course (AEC) : 2, Skill Enhancement Course (SEC) : 0, Generic Elective (GE) : 0



Head of Department



Controller of Examination





Secretary CDC



Principal

Shri Vile Parle Kelavani Mandal's
SHRI BHAGUBHAI MAFATLAL POLYTECHNIC

Learning and Assessment Scheme for Post S.S.C Diploma Programs

Program Name : Diploma In Computer Engineering

Programme Code : CSE

With Effect from Academic Year : 2023-24

Duration Of Programme : 6 Semester

Duration : 16 WEEKS

Semester : IV

Scheme : 2023

Sr No	Course Title & Code	Course Category	IK S (Hrs)	Learning Scheme					Credits	Assessment Scheme									Total Marks
				Actual Contact Hrs./Week			Self-Learning (SL*) (Term Work + Assignment) (Hrs)	Notional Learning Hrs /Week		Paper Duration (Hrs.)	Theory (Marks)			Based on LL & TL			Based on Self Learning		
				CL	TL	LL					FA-TH	SA-TH	Total	FA-PR	SA-PR	SA-OR		SLA (Marks)	
1	#Operating System (OSY238916)	DSC	-	04	-	02	-	06	03	03	30	70	100	50	25	-	-	175	
2	Programming In Python (PRP230807)	SEC	-	02	-	04	02	08	04	-	-	-	-	25	50	-	25	100	
3	# Elective – I (Any one)																		
3.1	#Cyber Security (CSY230808)	DSE	-	04	-	02	02	08	04	03	30	70	100	25	25	-	25	175	
3.2	#Advanced DBMS (ADB230809)	DSE	-	04	-	02	02	08	04	03	30	70	100	25	-	25	25	175	
4	#IoT & Applications (IOT238917)	AEC	-	04	-	02	-	06	03	03	30	70	100	50	-	25	-	175	
5	#Network Administration (NWA238918)	AEC	-	02	-	04	-	06	03	03	30	70	100	50	-	25	-	175	
6	Project Survey & Practices (PSP230810)	INP	-	-	-	02	02	04	02	-	-	-	-	25	-	-	25	50	
7	Generic Elective *** (Any one)	GE	-	02	-	-	-	02	01	-	-	-	-	50				50	
Total			-	18	-	16	06	40	20	Total papers=04	120	280	400	275	150	75	900		

Abbreviations : IKS - Indian Knowledge System, CL- Classroom Learning, TL- Tutorial Learning, LL-Laboratory Learning, FA - Formative Assessment, SA -Summative Assessment, SLA - Self Learning Assessment, TH-Theory, PR-Practical, OR-Oral

Legends : @ Online Examination, # Award Winning, *** As per Annexure AA

Note : 1. FA-TH represents average of two class tests of 30 marks each conducted during the semester.

2. If candidate is not securing minimum passing marks in FA-PR of any course then the candidate shall be declared as "Detained" in that semester.

3. If candidate is not securing minimum passing marks in SLA of any course then the candidate shall be declared as fail and will have to repeat and resubmit SLA work.

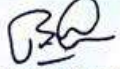
4. Notional Learning hours for the semester are (CL+TL+LL+SL)/Hrs. x 15 Weeks

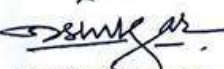
5. 1 credit is equivalent to 30 Notional Hrs.

6. ^ Self learning hours shall not be reflected in the Time Table.

7. SA-PR, SA-OR, Assessed by Internal and External Examiners Jointly FA-PR, SLA: Assessed by Internal Examiner Only

Course Category : Discipline Specific Course Core (DSC) : 1, Discipline Specific Elective (DSE) : 1, Value Education Course (VEC) : 0, Intern./Apprenti./Project/Community (INP) : 1, Ability Enhancement Course (AEC) : 2, Skill Enhancement Course (SEC) : 1, Generic Elective (GE) : 1


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Shri Vile Parle Kelavani Mandal's
SHRI BHAGUBHAI MAFATLAL POLYTECHNIC

Learning and Assessment Scheme for Post S.S.C Diploma Programs

Program Name : Diploma In Computer Engineering

Programme Code : CSE

With Effect From Academic Year : 2023-24

Duration Of Programme : 6 Semester

Duration : 16 WEEKS

Semester : V

Scheme : 2023

Sr No	Course Title & Code	Course Category	IKS (Hrs)	Learning Scheme					Credits	Assessment Scheme									Total Marks
				Actual Contact Hrs./Week			Self-Learning (SL*) (Term Work + Assignment) (Hrs)	Notional Learning Hrs /Week		Paper Duration (Hrs.)	Theory (Marks)			Based on LL & TL			Based on Self Learning		
				CL	TL	LL					FA-TH	SA-TH	Total	FA-PR	SA-PR	SA-OR			
																	SLA (Marks)		
1	#Cloud Services & Application (CSA238930)	DSC	-	04	-	02	-	06	03	03	30	70	100	50	-	25	-	175	
2	#Machine Learning & Tools (MLT230811)	DSC	-	04	-	02	02	08	04	03	30	70	100	25	-	25	25	175	
3	#Project (PRO230812)	INP	-	-	-	06	-	06	03	-	-	-	-	50	-	50	-	100	
4	# Software Development Methodology (SDM230813)	DSC	-	04	-	02	02	08	04	03	30	70	100	25	-	25	25	175	
5	#Elective – II (Any One)																		
5.1	#Full Stack Web Development (FSD230814)	DSE	-	04	-	02	-	06	03	03	30	70	100	50	25	-	-	175	
5.2	#Business Analytics (BSA230815)	DSE	-	04	-	02	-	06	03	03	30	70	100	50	25	-	-	175	
5.3	#Blockchain Technology (BCT230816)	DSE	-	04	-	02	-	06	03	03	30	70	100	50	-	25	-	175	
6	Entrepreneurship Development & start up (EDS230817)	AEC	-	03	-	02	01	06	03	1.5	30	70@	100	25	-	-	25	150	
Total			00	19	-	16	05	40	20	Total Papers=05	150	350	500	225	150		75	950	

Abbreviations : IKS - Indian Knowledge System ,CL- Classroom Learning , TL- Tutorial Learning, LL-Laboratory Learning, FA - Formative Assessment, SA -Summative Assessment, SLA - Self Learning Assessment, TH-Theory, PR-Practical, OR-Oral **Legends** : @ Online Examination-

Note : 1. FA-TH represents average of two class tests of 30 marks each conducted during the semester.

2. If candidate is not securing minimum passing marks in FA-PR of any course then the candidate shall be declared as "Detained" in that semester.

3. If candidate is not securing minimum passing marks in SLA of any course then the candidate shall be declared as fail and will have to repeat and resubmit SLA work.

4. Notional Learning hours for the semester are (CL+TL+LL+SL)Hrs. x 15 Weeks

5. 1 credit is equivalent to 30 Notional Hrs.

6. ^ Self learning hours shall not be reflected in the Time Table.

7. SA-PR,SA-OR: Assessed by Internal and External Examiners Jointly FA-PR, SLA: Assessed by Internal Examiner Only

Course Category : Discipline Specific Course Core (DSC) : 3, Discipline Specific Elective (DSE) : 1, Value Education Course (VEC) : 0, Intern/Apprenti/Project/Community (INP) : 1, Ability Enhancement Course (AEC) : 1, Skill Enhancement Course (SEC) : 0, Generic Elective (GE) : 0



[Signature]
Head of Department

[Signature]
Controller of Examination

[Signature]
Secretary CDC

[Signature]
Principal

Learning and Assessment Scheme for Post S.S.C. Diploma Courses

Programme Name: Diploma in Computer Engineering

Scheme:2023

SEMESTER: VI

INPLANT TRAINING

Sr. No.	Course Title & code	Training Duration	Credits		FA-PR		SA-OR		Total Marks	Course Category
					Weekly Report	Quiz Test	Dissertation (Report)	Oral/Viva		
1	# Inplant Training (IPT230818)	26 Weeks	20	Maximum Marks	50	50	50	50	200	INP
				Minimum Marks	20	20	20	20	80	

Abbreviations: FA - Formative Assessment, SA -Summative Assessment, OR-Oral. Legends: # Award Winning.

Course Category: Inplant training (INP)

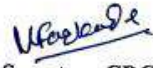
If candidate is not securing minimum passing marks in FA-PR of any course, then the candidate shall be declared as "Detained" in that semester.

Weekly Report and Quiz Test are assessed by Internal Examiner/Supervisor Only. Dissertation and Oral/Viva are Assessed by Internal and External Examiner jointly.


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Shri Vile Parle Kelavani Mandal's
SHRI BHAGUBHAI MAFATLAL POLYTECHNIC AND COLLEGE OF ENGINEERING

Learning and Assessment Scheme for Post S.S.C Diploma Program

List Of Award Winning Courses

Program Name : Diploma In Computer Engineering

Programme Code : CSE

With Effect From Academic Year : 2023-24

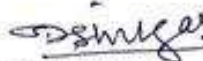
Duration Of Programme : 6 Semester

Duration : 16 WEEKS

Scheme : 2023

Sr No	Course Title & Code	Course Category	IKS (Hrs)	Learning Scheme						Credits	Assessment Scheme									Total Marks
				Actual Contact Hrs/Week			Self-Learning (SL) (Term Work + Assignments) (Hrs)	Notional Learning Hrs/Week	Paper Duration (Hrs.)		Theory (Marks)			Based on LL & TL			Based on Self Learning			
				CL	TL	LL					FA-TH	SA-TH	Total	Practical (Marks)						
														FA-PR	SA-PR	SA-OR		SLA (Marks)		
1	#Operating System (OSY238916)	DSC	-	04	-	02	-	06	03	03	30	70	100	50	25	-	-	175		
# Elective – I (Any one)																				
2	#Cyber Security (CSY230808)	DSE	-	04	-	02	02	08	04	03	30	70	100	25	25	-	25	175		
	#Advanced DBMS (ADB230809)	DSE	-	04	-	02	02	08	04	03	30	70	100	25	-	25	25	175		
5	#IOT & Applications (IOT238918)	AEC	-	04	-	02	-	06	03	03	30	70	100	50	-	25	-	175		
6	#Network Administration (NWA238919)	AEC	-	02	-	04	-	06	03	03	30	70	100	50	-	25	-	175		
7	#Cloud Services & Application (CSA238930)	DSC	-	04	-	02	-	06	03	03	30	70	100	50	-	25	-	175		
8	#Machine Learning & Tools (MLT230811)	DSC	-	04	-	02	02	08	03	03	70	100	25	-	25	25	175			


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9	#Project (PRO230812)	INP	-	-	-	06	-	06	03	-	-	-	-	50	-	50	-	100
10	# Software Development Methodology (SDM230813)	DSC	-	04	-	02	02	08	04	03	30	70	100	25	-	25	25	175
#Elective – II (Any One)																		
11	#Full Stack Web Development (FSD230814)	DSE	-	04	-	02	-	06	03	03	30	70	100	50	25	-	-	175
	#Business Analytics (BSA230815)	DSE	-	04	-	02	-	06	03	03	30	70	100	50	25	-	-	175
	#Blockchain Technology (BCT230816)	DSE	-	04	-	02	-	06	03	03	30	70	100	50	-	25	-	175
12	#Inplant Training (IPT230818)	INP	26 Weeks**				-	-	20	-	-	-	-	100	-	100	-	200
TOTAL		DSC, DSE, INP, AEC	-	30	-	24	06	60	50	24	240	560	800	475	100	300	75	1700

Abbreviations: IKS - Indian Knowledge System, CL- Classroom Learning, TL- Tutorial Learning, LL-Laboratory Learning, FA - Formative Assessment, SA -Summative Assessment, SLA - Self Learning Assessment, TH-Theory, PR- Practical, OR-Oral. Legend: @ Online Examination, #Award Winning, **Total Inplant Training Duration 26 weeks equal to 24 weeks actual training plus 2 weeks examination and processing

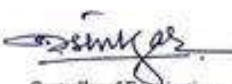
Note:

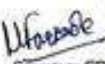
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4. Notional Learning hours for the semester are (CL+TL+LL+SL) Hrs. x 15 Weeks.
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6. * Self learning hours shall not be reflected in the Time Table.

7. SA-PR, SA-OR: Assessed by Internal and External Examiners Jointly. FA-PR, SLA: Assessed by Internal Examiner Only

Course Category: Discipline Specific Course Core (DSC) : 5, Discipline Specific Elective (DSE) : 2, Value Education Course (VEC) : 0, Intern./Apprent./Project./Coursework (IPAP) : 2, Ability Enhancement Course (AEC) : 1, Skill Enhancement Course (SEC) : 1, Generic Elective (GE) : 0


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Shri Vile Parle Kelavani Mandal's
Shri Bhagubhai Mafatlal Polytechnic
Computer Engineering Department



Sr. NO	COURSE CATEGORY						
	DSC	DSE	VEC	INP	AEC	SEC	GE
SEM I	ASC238902(3)	-	UHV238906(2)	-	EMT238901(3)	FCS238905(3)	-
	ENG238904(2)	-	-	-	CMS238903(3)	WSD238907(4)	-
SEM II	BEX238911(3)	-	EVS238909(1)	-	AMT238908(3)	CWP238901(1)	-
	FCN238902(4)	-	-	-	-	PRC238912(4)	-
	-	-	-	-	-	FSL238903(4)	-
SEM III	DST238914(3)	-	SLS238910(1)	-	PRJ238913(4)	-	-
	EUP238904(4)	-	-	-	FMP238905(3)	-	-
	DBS238915(3)	-	-	-	-	-	-
	LXL238906(2)	-	-	-	-	-	-
SEM IV	OSY238916(3)	CSY238908(4)	-	PSP238910(2)	IOT238917(3)	PRP238907(4)	ART238919(1)
	-	ADB238909(4)	-	-	NWA238918(3)	-	DMA238920(1)
	-	-	-	-	-	-	MTC238921(1)
	-	-	-	-	-	-	ADM238922(1)
	-	-	-	-	-	-	ECA238923(1)
	-	-	-	-	-	-	IGT238924(1)
	-	-	-	-	-	-	IPR238925(1)
	-	-	-	-	-	-	GEL238926(1)
	-	-	-	-	-	-	DIM238927(1)
	-	-	-	-	-	-	REN238928(1)
	-	-	-	-	-	-	INM238929(1)
SEM V	CSA238930(3)	FSD238914(3)	-	PRO238912(3)	EDS238917(3)	-	-
	MLT238911(4)	BSA238915(3)	-	-	-	-	-
	SDM238913(4)	BCT238916(3)	-	-	-	-	-
SEM VI	-	-	-	IPT238918(20)	-	-	-
Total Credits	38	07	04	25	25	10	01

Total Credits: 120 (All semester)

Head of Department

Controller of Examination

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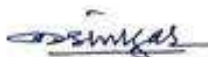


Credit summary for 2023 scheme

Program: Computer Engineering

Course Category	Semester I		Semester II		Semester III		Semester IV		Semester V		Semester VI		Total	
	Courses	Credits	Courses	Credits	Courses	Credits	Courses	Credits	Courses	Credits	Courses	Credits	Courses	Credits
DSC	2	5	2	7	4	12	1	3	3	11	-	-	12	38
DSE	-	-	-	-	-	-	1(2)	4(8)	1(3)	3(9)	-	-	2(5)	7(17)
VEC	1	2	1	1	1	1	-	-	-	-	-	-	3	4
INP	-	-	-	-	-	-	1	2	1	3	1	20	3	25
AEC	2	6	1	3	2	7	2	6	1	3	-	-	8	25
SEC	2	7	3	9	-	-	1	4	-	-	-	-	6	20
GE	-	-	-	-	-	-	1	1	-	-	-	-	1	1
Total	7	20	7	20	7	20	7(8)	20(24)	6(8)	20(26)	1	20	35(38)	120(130)


Head of Department


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Shri Vile Parle Kelavani Mandal's
Shri Bhagubhai Mafatlal Polytechnic
INFORMATION TECHNOLOGY DEPARTMENT



PROGRAMME: Computer Engineering		RATIO OF THEORY:PRACTICAL
Total Theory Hrs: 86 Total Theory Credits: 43	Total Practical Hrs: 78 +40(Inplant Training) = 118 Total Practical Credits: 39 +20 (Inplant Training) = 59	Theory: Practical = 52.43:47.57
Total Theory (Award Winning)(Hrs): 30	Total Practical (Award Winning)(Hrs): 24	55.55:44.45
Total TH Marks : 2200	Total PR Marks: 1725 +200(Inplant Training) = 1925	53.33:46.67
Total TH Marks for Award Winning Courses : 800	Total PR Marks for Award Winning Courses: 625 +200(Inplant Training) : 825 Total PR Marks for Award Winning Courses:625	49.23:50.76 56.14:43.86

Compulsory Credit (Without Inplant & Elective Credits)	: 92
Elective Credit	: 8
Inplant Training Credit	: 20
TOTAL CREDIT	: 120



Head of Department

Controller of Examination

Secretary CDC

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Shri Vile Parle Kelavani Mandal's
**SHRI BHAGUBHAI MAFATLAL POLYTECHNIC
AND COLLEGE OF ENGINEERING**

(DTE CODE : 3025)

Approved by AICTE, DTE, (M.S.)

Grant - in - aid, Autonomous Diploma Institute, NBA Accredited Diploma Programmes
UG Degree Programmes Affiliate to Dr. Babasaheb Ambedkar Technological University, Lonere



Exam/COE/QP/2025/ 875

Date: 03 OCT 2025

NOTICE

- Ref: 1. Board of Studies Meeting dated 15th March 2025.
2. Managing Council Meeting dated 3rd May 2025.

As per the ref. above the faculty members hereby are informed that there is change in Question Paper Pattern from academic year 2025-2026 (from November/December 2025 Examination) for all semester as follows. You are required to set the template of question paper as per given format as follows. The question paper setting method for all semester is QBMS.

NEW Question Paper Format							
Que No	Total Marks	Bit	Marks	Option Bit	Compulsory Marks	Optional Marks	Total No. of BIT
1	16	4	4	1	16	4	5
2	20	4	5	1	20	5	5
3	18	3	6	1	18	6	4
4	16	2	8	1	16	8	3
Total	70	13		4	70	23	17

Controller of Examinations



Vice Principal

Principal

Shri Vile Parle Kelavani Mandal's

Shri Bhagubhai Mafatlal Polytechnic and College of Engineering

TIME ALLOWED :	3 HOURS	PROGRAMME: Diploma in Computer Engg
MAXIMUM MARKS :	70	SEMESTER : I
COURSE NAME : Website Designing	COURSE CODE: WSD238907	
DATE:		TIME:
SEAT NO.:		

Instructions:

1. All the answers should be written in the single answer book.
2. All questions are compulsory.
3. Use of mathematical tables and non-programmable calculator is permissible.
4. Illustrate your answers with neat sketches, where necessary.
5. Figures to right indicates marks.
6. Assume suitable data, if necessary.

Q.1		Attempt any FOUR of the following:	16M (4*4)	CO
	a)			
	b)			
	c)			
	d)			
	e)			
Q.2		Attempt any FOUR of the following:	20 M (4*5)	CO
	a)			
	b)			
	c)			
	d)			
	e)			
Q.3		Attempt any THREE of the following:	18 M (3*6)	CO
	a)			
	b)			
	c)			
	d)			

Q.4		Attempt any TWO of the following:	16M (2*8)	CO
	a)			
	b)			
	c)			



Shri Vile Parle Kelavani Mandal's
SHRI BHAGUBHAI MAFATLAL POLYTECHNIC

(DTE CODE : 3025)



w.e.f. 10.06.2023

MANAGING COUNCIL
2025-2026

Representatives of Shri Vile Parle Kelavani Mandal		Shri Nayan Patel, Chairman Shri Chintan Patel Shri Hiten V.Parekh Shri Asoke Basak Dr.Madhav N.Welling Dr.Sharad Mhaiskar Dr.D.J.Shah
Representatives of Government		
Representative of the State Government		Dr. Vinod Mohitkar Director, Directorate of Technical Education, Maharashtra State,
Representative of the Maharashtra State Board of Technical Education		Dr. Pramod Naik Director, Maharashtra State Board of Tech.Education
Representative of Central Government		Shri P.N.Jumle Director, Board of Apprenticeship Training (W.R.)
Representative of the All India Council for Technical Education		Shri John Hongray Regional Officer& Assistant Director,All India Council for Technical Education (WesternRegio
Expert Members nominated by the State Government/AICTE		
Ex-Officio –Secretary-Principal		Dr.M.Z.Shaikh

II) BOARD OF STUDIES (2025-26)

Representative nominated by Managing Council –Chairman	One.	Shri Chetan Raikar (Chairman)
Nominee of Maharashtra State Board of Technical Education	One	Director, MSBTE (Mrs. V.P.Vankhede, MSBTE)
Principal of SBM Polytechnic	One	Dr.M.Z.Shaikh
Two representatives from industry of each discipline		<u>Civil Engg.Deptt.</u> (i) Shri DhirajkumarPandirkar (ii) Shri B.R.Patel, Alumni <u>Mechanical Engg.Deptt.</u> (i) Dr. Atul Dhale (ii) Shri Sunil Kangane_ <u>Electrical Engg.Deptt.</u> (i) Shri Ricky Uchil (ii) Shri Mahesh Vaidya <u>Electronics & Telecommunication</u> <u>Deptt.</u> (i) Shri V.M.Joshi (ii) Shri Hemant Shroff <u>Plastics Engg.Deptt.</u> (i) Mr. Manoj Bharadwaj (ii) Prof. Dr. V.R.Gaval <u>Chemical Engg.Deptt.</u> (i) Dr. Ramesh Vulavala (ii) Shri Atul Choudhari <u>Diploma in Computer /Information</u> <u>Technology</u> (i) Shri Harinder Salwan, (ii) Shri Ashish Tapiawala

Head of Department of each Programme	-	Dr. S.N.Ranshur I/CHead, Civil Engg.Deptt. Shri. R.R Ambade I/c. Head, Mechanical Engg.Deptt. Shri N.D.Adate, I/c. Head, Electrical Engg.Deptt. Shri L.B.Deshpnade, I/c. Head, Electronics Deptt. Mrs. Rameshwari Bawankar I/c. Head, Plastics Engg.Deptt. Shri R.D.Shimpi, Head, Chemical Engg. Deptt. Shri J.S.Kulkarni, Head, Computer Engg.Deptt. Mrs.Neeta Kadukar, Head, Information Technology Department Shri Gajanan Badwe, TPO Shri S.T.Khelkar, Controller of Exam.
Secretary CDC & Convener		Shri N.G. Farkade

I.3 Programme wise committee (PBOS)

Sr. No.	Name & Office address	PBOS Designation
1	Mr. Harinder Salwan Tricom Multimedia Pvt Ltd., Mumbai Business Phone / Fax: +91 22 2891 7099 / 2893 2737 / 2893 6622 / 2893 8483 Email - md@tricom.in	Chairman
2	Mr. Ashish Tapiawala Vibrant e-Technologies Pvt. Ltd., Mumbai. Mobile - 09867297260 Email - ashisht@yahoo.com	Member (Industry)
3	Mr. Milind Ugale Infinite IT Solutions Pvt. Ltd., Mumbai Mobile - 09820121654 Email - milind.ugaley@gmail.com	Member (Industry)
4	Mr. Rahul Kashyap RISK Advisory Services, Mumbai Mobile -09619261911 Email -rahulkashyap0201@gmail.com	Member (Industry)
5	Mr. Devang Parekh Accenture India, Mumbai Mobile - 09820891487 Email - devang0704@gmail.com	Member (Alumni)
6	Mr. Jay Mehta BlackCurrant Apps LLP, Mumbai Mobile - 09699818273 Email - jay@blackcurrantapps.com	Member (Alumni)
7	Dr. Subhash Shinde LT College of Engineering, Navi Mumbai. Mobile – 09594170066 Email – skshinde@rediffmail.com	Member (Academia)
8	Mr. Pratik Shah Department Curriculum Development Co-ordinator 9870243042 pratik.shah@sbmp.ac.in	Member
9	Mr. S.T.Khelkar Controller of Examinations 9323863104 sudhirkumar.khelkar@sbmp.ac.in	Member
10	Mr. N.G. Farkade Secretary CDC 9892375291 Nitin.farkade@sbmp.ac.in	Member
11	Mr. J. S. Kulkarni Head of the Department 9969326775 Janardan.kulkarni@sbmp.ac.in	Convener

I.4 PROGRAMME CURRICULUM DEVELOPMENT COMMITTEE

Institute Level Curriculum Development Cell

S. No.	Name of the Faculty	Designation
1	Dr. M.Z.Shaikh,Principal	Chairman
2	Mrs. Neeta Kadukar, Vice-Principal and Head, IT Dept.	Member
3	Shri. S.N. Ranshur, Head, Civil Engg.Dept.	Member
4	Shri R.R. Ambade, Head, Mechanical Engg.Dept.	Member
5	Shri N.D.Adate,I/C Head, Electrical Engg.Dept.	Member
6	Shri. L.B. Deshpande , I/c Head, Electronics and Telecommunications Dept.	Member
7	Mrs. R. M. Bawankar, Head, Plastics Engg.Dept.	Member
8	Shri R.D.Shimpi, Head, Chemical Engg.Dept.	Member
9	Shri J.S.Kulkarni, Head, Computer Engg.Dept.	Member
10	Shri A.B.Dongaonkar, Lecturer, IT Dept.	Member
11	Mrs. S.V. Suvarna,Lecturer,Chemistry Dept.	Member
12	Shri G.J.Badwe,Training and Placement Officer	Member
13	Shri S.T.Khelkar,Controller of Examinations	Member
14	Shri. N.G. Farkade,Lecturer,Electronics Dept.	Member Secretary

Department Level Committee (Department CO-Ordinators)

Sr. No.	Name of the Faculty	Designation
1	Dr. Neelam Petkar	Lecturer, Civil Engineering
2	Shri A. S. Shukla	Lecturer, Mechanical Engineering
3	Shri D. G. Rajmandai	Lecturer, Electrical Engineering
4	Ms. P. J. Nikhade	Lecturer, EXTC
6	Shri S. A. Kamble	Lecturer, Plastics Engineering
5	Shri M. M. Belwalkar	Lecturer, Chemical Engineering
7	Shri P. H. Shah	Lecturer, Computer Engineering
8	Shri P. D. Rathod	Lecturer, Information Technology

Course-wise Curriculum Development Committee - SCHEME 2023

Department of Computer Engineering

SEMESTER I

Sr. No	Course Code	Course Name	Course Expert Committee Member Internal		Course Expert External
1	EMT238901	Engineering Mathematics	Dr. Kavita Dange	Mr. A. S. Singh	Prof. Taqdis Pwale
2	ASC238902	Applied Science	Mr. A. A. Jogale	Mrs. Geetha S.	Mr. Manoj Jaiswar
3	CMS238903	Communication Skills	Mrs. Geetha S.	Mrs. Abhilasha More	Mrs Shweta Salian
4	ENG238904	Engineering Graphics	Mr. Pankaj Rathod	Ms. Sharyu Kadam	Mr. Ketan Sawant
5	FCS238905	Fundamentals of Computing System	Mrs. Radhika Patwardhan	Mr. Siddhesh Masurkar	Mr. J.N Nikhade
6	UHV238906	Universal Human Values	Mr. Balaji M Pande	Mr. Vinod Vanvari, Mrs. Prachi Arora	Mrs. Shiny Nair
7	WSD238907	Website Designing	Ms. Neha More	Mrs. Rupali Pawar	Mr. Rushabh Udani

SEMESTER II

Sr. No	Course Code	Course Name	Course Expert Committee Member Internal		Course Expert External
1	AMT238908	Applied Mathematics	Dr. Kavita Dange	Mr. A. S. Singh	Prof. Taqdis Pwale
2	EVS238909	Environmental Studies	Mrs. Radhika Patwardhan	Ms. Sharyu Kadam	Mrs Nidhi Dikshit
3	CWP230801	Workshop & Practices	Mr. Janardan Kulkarni	Mrs. Prachi Arora	Mr Devendra Parekh
4	BEX238911	Basic Electronics	Mr. Abhijit Dongaonkar	Mrs. Prachi Arora	Mr. Anil Gurav
5	PRC238912	Programming in C	Mrs. Krishna Bhatt	Mr. Pratik Shah	Mrs. Lakshmi kurup
6	FCN230802	Fundamentals of Computer Network	Mr. Akhilesh Gupta	Mr. Siddhesh Masurkar	Mr. Bhavesh Panchal
7	FSL230803	Fundamentals of Scripting Language	Ms. Neha More	Mrs. Geetha S.	Mr. Nikul Chheda

SEMESTER III

Sr. No	Course Code	Course Name	Course Expert Committee Member Internal		Course Expert External
1	SLS238910	Social & Life Skills	Mr. Balaji M Pande	Mrs. Kirti Bhawe	Mr. Prasad S. Dhuri
2	PRJ238913	Programming in Java	Mr. Manish Solanki	Mrs. Geetha S.	Mr. Siddhesh Vaidya
3	DST238914	Data Structure	Mrs. Radhika Patwardhan	Ms. Neha More	Mr. Prasad Wadkar
4	EUP230804	Event Driven & UI Programming	Mrs. Rupali Pawar	Mrs. Geetha S	Mr. Yogesh Salunkhe
5	DBS238915	Database Management System	Mr. Pankaj Rathod	Mr. Siddhesh Masurkar	Dr. Chetashri Bhadane
6	FMP230805	Fundamentals of Microprocessor	Ms. Sharyu Kadam	Mrs. Prachi Arora	Mr. Anil Gurav
7	LXL230806	Linux Lab	Mr. Janardan Kulkarni	Mr. Pratik Shah	Ms Heena Sarvaiya

SEMESTER IV

Sr. No	Course Code	Course Name	Course Expert Committee Member Internal		Course Expert External
1	OSY238916	#Operating System	Ms. Neha More	Mrs. Krishna Bhatt	Mr. Manish Salvi
2	PRP230807	Programming in Python	Mr. Manish Solanki	Ms. Priti Bokariya	Ms. Ekta Shah
3		#Elective-I (Any One)			
	CSY230808	i) #Cyber Security	Ms. Pradnya Natekar	Mr. Siddhesh Masurkar	Mr. Narendra Shekokar
	ADB230809	ii) #Advanced DBMS	Mr. Akhilesh Gupta	Mr. Siddhesh Masurkar	Mr. Vaibhav Vasani
4	IOT238917	#IoT & Applications	Ms. Sharyu Kadam	Mr. Pankaj Rathod	Mr. Ashish Taldeokar
5	NWA238918	#Network Administration	Mrs. Abhilasha More	Ms. Pradnya Natekar	Mr. Prathamesh Churi
6	PSP230810	Project Survey & Practices	Mr. Janardan Kulkarni	Mrs. Prachi Arora	Dr. Dhiraj Mishra
7.		Generic Elective (Any One)***			
	DIM238927	Digital Marketing	Mr. Janardan Kulkarni	Mr. Pratik Shah	Mr. Rahil Shah

SEMESTER V

Sr. No	Course Code	Course Name	Course Expert Committee Member Internal		Course Expert External
1	CSA238930	#Cloud Services & Application	Mr. Manish Solanki	Mrs. Krishna Bhatt	Mr. Tejas J Shah
2	MLT230811	#Machine Learning & Tools	Ms. Pradnya Natekar	Mr. Siddhesh Masurkar	Mr. Manthan Desai
3	PRO230812	#Project	Mrs. Prachi Arora	Mr. Janardan Kulkarni, Mr. Pratik Shah	Mr. Harinder Salwan
4	SDM230813	#Software Development Methodology	Mrs. Geetha S.	Ms. Neha More	Mr. Milind Ugale
5		#Elective III (Any One)			
	FSD230814	i) #Full Stack Web Development	Ms. Priti Bokariya	Ms. Neha More	Ms. Madhuri Rokade
	BSA230815	ii) #Business Analytics	Mr. Akhilesh Gupta	Mrs. Rupali Pawar	Mr. Vishal Sharma
	BCT230816	iii) #Blockchain Technology	Ms. Sharyu Kadam	Ms. Priti Bokariya	Dr. Sagar Rane,
6	EDS230817	Entrepreneurship Development & Startup	Ms. Pradnya Natekar	Mr. Siddhesh Masurkar	Mr. Devang Parekh

SEMESTER VI

Sr. No	Course Code	Course Name	Course Expert Committee Member Internal		Course Expert External
1	IPT230818	#Inplant Training	Ms. Neha More	Mrs. Rupali Pawar	Mr. Harindar Salwan


 CDC Co-Ordinator
 (Department)


 Head of the Department
 (J. S. Kulkarni)

Certificate

The curriculum of the programme has been modified progressively from the A.Y. 2023-2024, as per the provision made in curriculum development process of Shri Bhagubhai Mafatal Polytechnic, Mumbai. This is the **outcome-based Curriculum (based on NEP-2020) of Diploma in Computer Engineering**, which shall be implemented from academic year 2023-2024.

Verified by



Department Level CDC Representative
S.B.M.Polytechnic, Mumbai.



Head of Department
Computer Engineering
S.B.M.Polytechnic, Mumbai.



Secretary, Curriculum Development Cell
S.B.M. Polytechnic, Mumbai.



Principal
S.B.M. Polytechnic, Mumbai.



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Date : 20th February 2025

To whomsoever it may concern,

The Diploma in Computer Engineering curriculum has been reviewed and is aligned with current industry practices, technologies, and professional requirements. The curriculum effectively incorporates practical exposure in areas such as Software Development, Project Management, Cloud Applications, Networking, and other essential technical and professional skills relevant to today's industry standards.

The syllabus equips students for various industry roles including Service Technician, Programmer, Desktop Support Engineer, Cloud Application Developer, and Network Administrator, in accordance with the curriculum objectives defined under the revised academic framework (w.e.f. 2023 onwards) and the guidelines for autonomous diploma courses of Shri Bhagubhai Mafatlal Polytechnic.

Based on our review, the curriculum is well-structured and aligned with current industry expectations.

Regards,
Nirav Panchal
Founder | Chief Executive Officer

Blackcurrent Labs Pvt Ltd.

www.blackcurrentapps.com

**ACKNOWLEDGEMENT FOR BENCHMARKING OF
CURRICULUM OF DIPLOMA IN COMPUTER ENGINEERING
OFFERED BY SHRI BHAGUBHAI MAFATLAL POLYTECHNIC**

The curriculum of Diploma in Computer Engineering is updated and at-par with various practiced technologies in the industry that foster skills of Software Development, Project Management and other soft skills that fulfill industry requirements.

The syllabus qualifies the student to be absorbed as a Service Technician Programmer as per curriculum objectives (w.e.f 2023 designed syllabus onwards & state government guidelines for academic autonomous Diploma Courses of S.B.M. Polytechnic. Therefore the curriculum is as per industry standards.



Jay Mehta,
Managing Director & CEO,
Blackcurrent Labs Pvt. Ltd.

Blackcurrent Labs Pvt. Ltd.

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Phone no.: 7021980537 / 9820080751

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Acknowledgement for Benchmarking of Curriculum of Diploma in Computer Engineering offered by Shri Bhagubhai Mafatlal Polytechnic

The curriculum of Diploma in Computer Engineering is updated and at-par with various practiced technologies in the industry that foster skills of Software Development, Project Management and other soft skills that fulfil industry requirements.

The syllabus qualifies the student to be absorbed as a Service Technician, Programmer, Desktop engineer, Cloud App Developer and network administrator as per curriculum objectives (w.e.f 2023 designed syllabus onwards & state government guidelines for academic autonomous Diploma Courses of S.B.M. Polytechnic. Therefore, the curriculum is as per industry standards.

JITENDRA PUROHIT

COO

**JITENDRA
BABULAL
PUROHIT**

Digitally signed by
JITENDRA BABULAL
PUROHIT
Date: 2023.03.08
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Acknowledgement for Benchmarking of Curriculum of Diploma in Computer Engineering

offered by Shri Bhagubhai Mafatlal Polytechnic

The curriculum of Diploma in Computer Engineering is updated and at-par with various practiced

technologies in the industry that foster skills of Software Development, Project Management and other soft skills that fulfil industry requirements.

The syllabus qualifies the student to be absorbed as a Service Technician, Programmer, Desktop engineer, digital marketing as per curriculum objectives (w.e.f 2023 designed syllabus onwards & state government guidelines for academic autonomous Diploma Courses of S.B.M. Polytechnic. Therefore, the curriculum is as per industry standards.

Tushar Shah

