

NATIONAL BOARD OF ACCREDITATION

Data Capturing Points of the Program Applied for NBA Accreditation– Tier I/II UG (Engineering) Institute Programs

Program Name : Computer Science and Engineering	Discipline: Engineering & Technology
Level : Under Graduate	Tier: 1
Application No: 10374	Date of Submission: 03-03-2025

PART A- Profile of the Institute

A1.Name of the Institute: M.T.E.SOCIETY S WALCHAND COLLEGE OF ENGG VISHRAMBAG P.O.WILLINGDON COLLEGE SANGLI	
Year of Establishment : 1947/1994	Location of the Institute: Sangli
A2. Institute Address: OPP.WILLINGDON COLLEGE POST OFFICE VISHRAMBAG SANGLI	
City:SANGLI	State:Maharashtra
Pin Code:416415	Website:www.walchandsangli.ac.in
Email:WALCHAND@REDDIFFMAIL.COM	Phone No(with STD Code):0233-2303433
A3. Name and Address of the Affiliating University (if any):	
Name of the University :	City: Kolpur
State : Maharashtra	Pin Code: 416004
A4. Type of the Institution: Government Aided Institute	
A5. Ownership Status: Government Aided	

A6. Details of all Programs being Offered by the Institution:

- No. of UG programs: 6
- No. of PG programs: 11

Table No. A6.1: List of all programs offered by the Institute.

Sr.No.	Discipline	Level of program	Name of the program	Year of Start	Year of Closed	Name of The Department
1	Engineering & Technology	UG	Civil Engineering	1947	--	Civil Engineering
2	Engineering & Technology	UG	Computer Science and Engineering	1986	--	Computer Science and Engineering
3	Engineering & Technology	PG	Computer Science and Engineering	1997	--	Computer Science and Engineering
4	Engineering & Technology	PG	Construction Management	2024	--	Civil Engineering
5	Engineering & Technology	PG	Control Systems	1971	--	Electrical Engineering
6	Engineering & Technology	PG	Design Engineering	1971	--	Mechanical Engineering
7	Engineering & Technology	UG	Electrical Engineering	1955	--	Electrical Engineering
8	Engineering & Technology	PG	Electronics & Communication Engineering	2024	--	Electronics Engineering
9	Engineering & Technology	UG	Electronics Engineering	1986	--	Electronics Engineering
10	Engineering & Technology	PG	Electronics Engineering	1986	--	Electronics Engineering
11	Engineering & Technology	PG	Environmental Engineering	1971	--	Civil Engineering

12	Engineering & Technology	UG	Information Technology	2001	--	Information Technology
13	Engineering & Technology	PG	Manufacturing Engineering	1981	--	Mechanical Engineering
14	Engineering & Technology	UG	Mechanical Engineering	1956	--	Mechanical Engineering
15	Engineering & Technology	PG	Power Systems	1971	--	Electrical Engineering
16	Engineering & Technology	PG	Structural Engineering	1971	--	Civil Engineering
17	Engineering & Technology	PG	Thermal Engineering	1971	--	Mechanical Engineering

A7. Programs to be considered for Accreditation vide this Application:

Table No. A7.1: List of programs to be considered for accreditation.

Name of the Department	Having Allied Departments	Name of the Program	Program Level
Electronics Engineering	No	Electronics Engineering	UG
Computer Science and Engineering	No	Computer Science and Engineering	UG

Table No. A7.2: Allied Department(s) to the Department of the program considered for accreditation as above.
Cluster ID. Name of the Department (in table no. A7.1) Name of allied Departments/Cluster (for table no. A7.1)

No Record

PART-B: Program information**B1. Provide the Required Information for the Program Applied For:**

Table No. B1: Program details.

A. List of the Programs Offered by the Department:

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NC TII PF AC
1	Computer Science and Engineering	UG	1986 / --	90	Yes	2024	180	2024	F.No. Western/1-43658167792/2024/EOA, Date of Approval: 13-May-2024	Not accredited (specify visit dates, year)	11/10/2019	13/10/2019	0

Sanctioned Intake for Last Five Years for the Computer Science and Engineering	
Academic Year	Sanctioned Intake
2024-25	180
2023-24	90
2022-23	90
2021-22	90
2020-21	90
2019-20	90

List of the Allied Departments/Cluster and Programs:

B2. Detail of Head of the Department for the program under consideration:

A. Name of the HoD :

Dr. M. A. Shah

B. Nature of appointment:	Regular
C. Qualification:	ME/M. Tech and PhD

B3. Program Details

Table No.B3.1: Admission details for the program excluding those admitted through multiple entry and exit points.

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2024-25 (CAY)	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)	2020-21 (CAYm4)	2019-20 (CAYm5)	2018-19 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	180	90	90	90	90	90	90
N1=Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	180	90	90	90	90	90	90
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	12	14	14	12	12	12
N3=Separate division if any	0	0	0	0	0	0	0
N4=Total no. of students admitted in the 1st year via all supernumerary quotas	48	24	21	25	18	20	13
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	228	126	125	129	120	122	115

CAY= Current Academic Year. CAYm1= Current Academic Year Minus 1 CAYm2= Current Academic Year Minus 2. LYG= Last Year Graduate. LYGM1= Last Year Graduate Minus 1. LYGM2= Last Year Graduate Minus 2.

B4. Enrolment Ratio in the First Year

Table No. B4.1: Student enrolment ratio in the 1st year.

Year of entry	N (From Table 4.1)	N1 (From Table 4.1)	N4 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2024-25 (CAY)	180	48	0	126.67
2023-24 (CAYm1)	90	24	0	126.67
2022-23 (CAYm2)	90	21	0	123.33

Average [(ER1 + ER2 + ER3) / 3] = 125.56 ≈ 100

B5. Success Rate of the Students in the Stipulated Period of the Program

Table No.B5.1: The success rate in the stipulated period of a program.

Item	(2020-21) LYG	(2019-20) LYGM1	(2018-19) LYGM2
A*= (No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any).	120.00	122.00	115.00
B=No. of students who graduated from the program in the stipulated course duration	112.00	120.00	109.00
Success Rate (SR)= (B/A) * 100	93.33	98.36	94.78

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 95.49

B6. Academic Performance of the First-Year Students of the Program

Table No.B6.1: Academic Performance of the First-Year Students of the Program.

Academic Performance	CAYm1(2023-24)	CAYm2(2022-23)	CAYm3 (2021-22)
Mean of CGPA or mean percentage of all successful students(X)	7.92	8.17	7.95
Y=Total no. of successful students	110.00	103.00	109.00
Z=Total no. of students appeared in the examination	114.00	111.00	115.00
API [X*(Y/Z)]	7.64	7.58	7.54

Average API[(AP1+AP2+AP3)/3] : 7.59

B7: Academic Performance of the Second Year Students of the Program

Table No.B7.1: Academic Performance of the Second Year Students of the Program.

Academic Performance	CAYm1 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2nd year/10)	7.91	7.71	8.50
Y=Total no. of successful students	115.00	118.00	115.00
Z=Total no. of students appeared in the examination	117.00	123.00	119.00
API [X * (Y/Z)]	7.77	7.40	8.21

Average API [(AP1 + AP2 + AP3)/3] : 7.79

B8. Academic Performance of the Third Year Students of the Program

Table No.B8.1: Academic Performance of the Third Year Students of the Program

Academic Performance	CAYm1 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10)	7.87	8.03	8.37
Y=Total no. of successful students	116.00	114.00	120.00
Z=Total no. of students appeared in the examination	118.00	115.00	121.00
API [X*(Y/Z)]:	7.74	7.96	8.30

Average API [(AP1 + AP2 + AP3)/3] : 8.00

B9. Placement, Higher Studies, and Entrepreneurship

Table No.B9.1: Placement, higher studies, and entrepreneurship details.

Item	LYG (2020-21)	LYGm1(2019-20)	LYGm2(2018-19)
FS*=Total no. of final year students	114.00	120.00	109.00
X=No. of students placed	100.00	106.00	101.00
Y=No. of students admitted to higher studies	1.00	3.00	1.00
Z=Total no. of students appeared in the examination	0.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	88.60	90.83	93.58

Average Placement Index = (P_1 + P_2 + P_3)/3: 91.00 Placement Index Points:

PART C: Faculty Details in Department and Allied Departments**(Data to be filled in for the Department and Allied Departments)****C1. Faculty details of Department and Allied Departments**

Table No.C1: Faculty details in the Department for the past 3 years including CAY

Sr.No	Name of the Faculty	PAN No.	Highest degree	University	Area of Specialization	Date of Joining in this Institution	Experience in years in current institute	Designation at Time Joining in this Institution	Present Designation	The date on which Designated as Professor/ Associate Professor if any	Nature of Association (Regular/ Contract/ Ad hoc)	Currently Associated (Y/N)	In case of NO, Date of Leaving	IS HOD?
1	Dr. B. F. Momin	XXXXXXX49C	XXXXXXXXXXXXXXPhD	Jadhavpur University Kolkata	DBMS, Data Mining, Soft Computing	01/01/1996	29.1	Assistant Professor	Professor	01/04/2017	Regular	Yes		No
2	Dr. A. R. Surve	XXXXXXX38L	XXXXXXXXXXXXXXPhD	Shivaji University Kolhapur	IoT, Software Enginnering	18/01/2002	23.1	Assistant Professor	Assistant Professor		Regular	Yes		No
3	Dr. M. A. Shah	XXXXXXX20F	XXXXXXXXXXXXXXPhD	Shivaji University Kolhapur	HPC, Cloud Computing	01/04/2003	21.10	Assistant Professor	Associate Professor	08/07/2019	Regular	Yes		Yes
4	Dr. N. L. Gavankar	XXXXXXX67F	XXXXXXXXXXXXXXPhD	IIT Roorkee	Image Proc., Remote Sensing, GIS	06/02/2007	18	Assistant Professor	Associate Professor	01/04/2020	Regular	Yes		No
5	Mr. M. K. Chavan	XXXXXXX31N	M.E/M.Tech	Dr.Babasaheb Ambedkar Technological University	Cyber Security	24/03/2014	10.11	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Ms. N. L. Mudegol	XXXXXXX60H	M.E/M.Tech	Savitribai Phule Pune University	Soft Computing, Machine Learning, RGIS	11/07/2014	10.7	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
7	Ms. P. D. Mundada	XXXXXXX30J	M.E/M.Tech	Shivaji University Kolhapur	Image Processing	31/08/2017	7.5	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
8	Ms. S. S. Rokade	XXXXXXX89B	M.E/M.Tech	Savitribai Phule Pune University	Computer Network	16/08/2019	5.6	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
9	Mr. S. D. Pujari	XXXXXXX42F	M.E/M.Tech	Shivaji University Kolhapur	Data Mining, AI/ML	16/08/2019	5.6	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
10	Ms. A. S. Pawar	XXXXXXX52F	M.E/M.Tech	Shivaji University Kolhapur	Parallel Computing	04/08/2017	7.6	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
11	Ms. A. M. Chimanna	XXXXXXX41P	M.E/M.Tech	Shivaji University Kolhapur	Image Processing, Human Computer Interaction	16/08/2019	5.6	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No

12	Ms. A. A. Pawde	XXXXXXX23Q	M.E/M.Tech	Savitribai Phule Pune University	Machine Learning	10/07/2023	1.7	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
13	Ms. S. A. Aitwade	XXXXXXX68B	M.E/M.Tech	Solapur University	Machine Learning	01/09/2022	2.5	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
14	Mr. A. A. Urunkar	XXXXXXX26Q	M.E/M.Tech	Savitribai Phule Pune University	Network Technologies	30/08/2023	1.5	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
15	Ms. M. S. Dabade	XXXXXXX07L	M.E/M.Tech	Jawaharlal Nehru Technological University	Operating System	30/08/2022	2.5	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
16	Ms. A. B. Shikalgar	XXXXXXX82D	M.E/M.Tech	Shivaji University Kolhapur	Theory of Computation	22/09/2023	0.10	Assistant Professor	Assistant Professor		Contractual Fulltime	No	30/07/2024	No
17	Ms. S. F. Shaikh	XXXXXXX13C	M.E/M.Tech	Savitribai Phule Pune University	AIML, Image Processing	08/01/2024	1.1	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
18	Ms. L. V. Patil	XXXXXXX02P	M.E/M.Tech	Jawaharlal Nehru Technological University	Machine Learning	08/01/2024	1.1	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
19	Mr. V. R Mali	XXXXXXX86P	M.E/M.Tech	Shivaji University Kolhapur	AIML, IoT	17/01/2024	1.1	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
20	Mr. K. S. Khandagale	XXXXXXX68D	M.E/M.Tech	Shivaji University Kolhapur	Cloud Computing	12/08/2024	0.6	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
21	Mr. O. A. Terdalkar	XXXXXXX05F	M.E/M.Tech	Shivaji University Kolhapur	IoT	29/01/2024	1	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
22	Mr. R. R. Patil	XXXXXXX24D	M.E/M.Tech	Shivaji University Kolhapur	IoT	30/08/2022	2.5	Assistant Professor	Assistant Professor		Contractual Fulltime	No	08/09/2023	No

Table No.C2: Faculty details of Allied Departments for the past 3 years including CAY.

C2. Student-Faculty Ratio (SFR)

No. of UG(Engineering) programs in Department including allied departments/ clusters (UGn):

UG1=1st UG program

UGn=nth UG program

B= No. of Students in UG 2nd year (ST)

C= No. of Students in UG 3rd year (ST)

D= No. of Students in UG 4th year (ST)

No. of PG (Engineering) programs in Department including allied departments/ clusters (PGm):

PG1=1st PG program.

PGm=mth PG program

A= No. of Students in PG 1st year

B= No. of Students in PG 2nd year

Student Faculty Ratio (**SFR**) = S/F

S= No. of students of all programs in the Department including all students of allied departments/clusters.

No. of students (ST)=Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA)

Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are exempted.

F=Total no. of regular or contractual faculty members (Full Time) in the Department, including allied departments/clusters (excluding first year faculty (The faculty members who have a 100% teaching load in the first-year courses)).

No. of UG Programs in the Department1 No. of PG Programs in the Department1

Table No.C2.1: Student-faculty ratio.

Description	CAY(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
UG1.B	99	99	99
UG1.C	99	99	99
UG1.D	99	99	99
UG1: Computer Science and Engineering	297	297	297
PG1.A	12	12	30
PG1.B	12	30	30
PG1: Computer Science and Engineering	24	42	60
DS=Total no. of students in all UG and PG programs in the Department	321	339	357
AS=Total no. of students of all UG and PG programs in allied departments	0	0	0
S=Total no. of students in the Department (DS) and allied departments (AS)	S1= 321	S2= 339	S3= 357
DF=Total no. of faculty members in the Department	20	15	13
AF= Total no. of faculty members in the allied Departments	0	0	0
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	F1= 20	F2= 15	F3= 13
FF=The faculty members in F who have a 100% teaching load in the first-year courses	3	1	1
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 18.88	SFR2= 24.21	SFR3= 29.75
Average SFR for 3 years	SFR= 24.28		

C3. Faculty Qualification

- Faculty qualification index (FQI) = $2.5 * [(10X + 4Y) / RF]$ where
- X=No. of faculty members with Ph.D. degree or equivalent as per AICTE/UGC norms.
- Y=No. of faculty members with M. Tech. or ME degree or equivalent as per AICTE/ UGC norms.
- RF=No. of required faculty in the Department including allied Departments to adhere to the 20:1 Student-Faculty ratio, with calculations based on both student numbers and faculty requirements as per section C2 of this documents: (RF=S/20).

Table No.C3.1: Faculty qualification.

Year	X	Y	RF	FQ = 2.5 x [(10X + 4Y) / RF]
2024-25(CAY)	4	16	16.00	16.25
2023-24(CAYm1)	4	11	16.00	13.12
2022-23(CAYm2)	4	9	17.00	11.18

C4. Faculty Cadre Proportion

- Faculty Cadre Proportion is 1(RF1): 2(RF2): 6(RF3)
- RF1= No. of Professors required = $1/9 * \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per C2 of this documents:}$

- RF2= No. of Associate Professors required = $2/9 * \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S)}$ as per section C2 of this documents:.
- RF3= No. of Assistant Professors required = $6/9 * \text{No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S)}$ as per section C2 of this documents:.
- Faculty cadre and qualification and experience should be as per AICTE/UGC norms.

Table No.C4.1: Faculty cadre proportion details.

Year	Professors		Associate Professors		Assistant Professors	
	Required RF1	Available AF1	Required RF2	Available AF1	Required RF3	Available AF3
2024-25	1.00	1.00	3.00	2.00	10.00	2.00
2023-24	1.00	1.00	3.00	2.00	11.00	2.00
2022-23	1.00	1.00	3.00	2.00	11.00	2.00
Average	RF1=1.00	AF1=1.00	RF2=3.00	AF2=2.00	RF2=10.67	AF2=2.00

C5. Visiting/Adjunct Faculty/Professor of Practice

Table No. C5.1: List of visiting/adjunct faculty/professor of practice and their teaching and practical loads.

(CAYm1)					
S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. P. J. Kulkarni	Adjunct Professor	RIT, Sakharale	Information Security	78.00
2	Dr. Souvit Barat	Adjunct Professor	Tata Consultancy Services	Digital Twin, Research I/P	58.00
3	Mr. Shailesh S Patil	Associate Professor of Practice	WCE Sangli	Machine Learning	208.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. Souvit Barat	Adjunct Professor	Tata Consultancy Services	Digital Twin, Research I/P	58.00

(CAYm3)

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)
1	No. of peer reviewed journal papers published	5	4	6
2	No. of peer reviewed conference papers published	4	5	6
3	No. of books/book chapters published	0	0	2

C7. Sponsored Research Project

Table No. C7.1: List of sponsored research projects received from external agencies.

(CAYm1)

(CAYm2)

(CAYm3)

Total Amount (Lacs) Received for the Past 3 Years: NIL**Note*:**

- Only sponsored research projects will be considered. Infrastructure-based projects will not be considered here.

C8. Consultancy Work

Table No. C8.1: List of consultancy projects received from external agencies.

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr.Nitin L.Gavankar	Dr.Nitin L. Gavankar	Computer Science and Engineering	App for Apple iPhone	Vivekanand Electricals Enterprises	4 months	0.30
						Amount received (Rs.):0.30

(CAYm2)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Mr.M.K Chavan	Mr.M.K Chavan	Computer Science and Engineering	Cloud based HIS system	Techjivaa software private limited	4 months	6.30
Mrs.S.S.Rokade	Mrs.S.S.Rokade	Computer Science and Engineering	Manhole cleaning robot	Wisefinch Robotics and Automation Pvt. Ltd.	4 months	0.30
						Amount received (Rs.):6.60

(CAYm3)

Total amount (Lacs) received for the past 3 years: 6.90**Note*:**

- Only consultancy projects will be considered. Infrastructure-based projects will not be considered here.

C9. Institution Seed Money or Internal Research Grant to its Faculty for Research Work

Table No. C9.1: List of faculty members received seed money or internal research grant from the Institution.

(CAYm1)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Aditi Pawde	Seed funding (Development of AI based solid waste segregator for Municipal Solid Waste)	2 Years	0.71	0.00	Publication and patent
Siddharaj Pujari, Sonali Rokade	Seed funding (Tas: Teaching assistance systems for autistic students using AR-VR	2 Years	2.65	2.65	Publication in progress
			Amount received (Rs.): 3.36		

(CAYm2)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
			Amount received (Rs.): 0		

(CAYm3)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
			Amount received (Rs.): 0		

Total amount (Lacs) received for the past 3 years : 3.36

PART D: Laboratory Infrastructure in the Department

(Data to be filled in for the Department)

D1. Adequate and Well-Equipped Laboratories, and Technical Manpower

Table No.D1.1: List of laboratories and technical manpower.

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	Networking and IoT Laboratory	15	Desktops, Projector, UPS, IoT material, Network switch	26 hrs/ week	Mrs. G. G. Gawali	Laboratory Assistant	1) HSC 2) MSCIT – Typ
2	Database Engineering Laboratory	15	Desktops, Projector, UPS, Network switch	16 hrs/ week	Mr. M. H. Bhide	Laboratory Assistant	1) Diploma In Industrial
3	Image Processing and Computer Vision Laboratory	15	Desktop, Smart board, Network switch	16 hrs/ week	Mrs. G. G. Gavali &	Laboratory Assistant	1) HSC 2) MSCIT – Typ
4	Programming Laboratory	15	Desktop, Projector, Network switch	26 hrs/ week	Mr. S. A. Kolape	Laboratory Assistant	1) HSC 2) MSCIT
5	Advanced Software Engineering Laboratory	45	Desktop, UPS, PA system, Router	22 hrs/ week	Mr. R. S. Magdum	Laboratory Assistant	Diploma in Electronics &
6	Artificial Intelligence and Machine Learning Laboratory	15	Desktop, Projector, UPS	16 hrs/ week	Mr. M. H. Bhide	Laboratory Assistant	1) Diploma In Industrial
7	Innovation and Project Laboratory	15	Desktop, Projector, UPS, Drone and Robotics related hardware	16 hrs/ week	Mr. S. S. Kulkarni	Laboratory Assistant	1)HSC 2)MSCIT
8	PG Research Laboratory	12	Desktop, Projector, UPS, Printer, Network switch	28 hrs/ week	Mr. S. S. Kulkarni	Laboratory Assistant	1)HSC 2)MSCIT

9	PG Computing Laboratory	12	Desktop	21 hrs/ week	Mr. S. S. Kulkarni	Laboratory Assistant	1)HSC 2)MSCIT
---	-------------------------	----	---------	--------------	--------------------	----------------------	---------------

D2. Safety Measures in Laboratories

Table No. D2.1: List of various safety measures in laboratories.

Sr. No	Laboratory Name	Safety Measures
1	Networking and IoT Lab	Fire extinguisher - 1, safety poster - 1, earthing, CCTV camera
2	Database Engineering Lab	Fire extinguisher - 1, safety poster - 1, earthing, CCTV camera
3	Programming Lab	Fire extinguisher - 1, safety poster - 1, earthing, CCTV camera
4	Image Processing and Computer Vision Lab	Fire extinguisher - 1, safety poster - 1, earthing, CCTV camera
5	Advanced Software Engineering Lab	Fire extinguisher - 1, safety poster - 1, earthing, CCTV camera
6	AI – ML Lab	Fire extinguisher - 1, safety poster - 1, earthing, CCTV camera
7	Innovation and Project Lab	Fire extinguisher - 1, safety poster - 1, earthing, CCTV camera
8	PG Research lab	Fire extinguisher - 1, safety poster - 1, earthing, CCTV camera
9	PG Computing Lab	Fire extinguisher - 1, safety poster - 1, earthing, CCTV camera

D3. Project Laboratory/Research Laboratory

- A Center of Excellence (CoE) in an engineering college fosters advanced research, innovation, and industry collaboration, helping students and faculty stay at the forefront of emerging technologies. It enhances the institutions academic reputation and equips students with practical skills aligned with current industry needs.
- The department boasts a state-of-the-art Mac Lab, designated as a Center of Excellence (CoE), that focuses on developing and maintaining expertise in the Mac platform, serving as a hub for fostering innovation, best practices, and knowledge sharing.
- The CoE provides students with the opportunity to work on cutting-edge technologies and gain practical experience, preparing them for future careers.

Table 7.5.1: List of project laboratory/research laboratory /Centre of Excellence

S.N.	Name of the Laboratory
1.	Mac Lab Center of Excellence Seating capacity: 30



Figure 7.5.1: Apple Center of Excellence

- **Relevance to PO/PSO:**

By using these resources, students can **design and develop software solutions** with real-time constraints and advanced functionalities, thus directly addressing PO3.

- **Hands-on training** in modern development environments like **Xcode**, which is a powerful IDE for developing apps across all Apple platforms and **Swift** programming language, which is modern, safe, and widely used for mobile and system-level development. This applies to PO5.
- The focused training and real-world projects using Apple's technology stack directly enhance **domain-specific knowledge in app development and software engineering**, fulfilling PSO1.
- The department has ensured that there are faculties who are available for students to work in this CoE. Following faculty members have acquired '**iOS App Development with Swift**':

Table 7.5.1: List of certified faculty members in iOS App development

S. NO.	Name of the faculty	Date of certification
1	Ms. Aprupa. S. Pawar	27 th June 2023
2	Mrs. Swapnali. A. Aitwade	27 th June 2023
3	Ms. Nandinee. L. Mudegol	28 th July 2024
4	Mr. Siddharaj. D. Pujari	1 st July 2024

- The CoE has been utilized by including industry relevant content, revenue generation, offering value added courses, and internships to students:

1. Curriculum involvement:

This CoE is used for the following course in the curriculum.

Table 7.5.2: Courses utilizing MAC CoE

AY 2023 - 2024			
Course code	Course name	Year	Semester
6CS381	Elective III Lab: iOS Lab	Third Year B Tech	Even
AY 2024 - 2025			
Course code	Course name	Year	Semester
6CS381	Elective III Lab: iOS Lab	Third Year B Tech	Even

2. Revenue generation:

An iOS app iReminder has been developed and delivered to an esteemed customer.

Table 7.5.3: Development project by students utilizing Mac CoE

AY 2023 - 2024					
PRN	Name	Project title	Semester	Client details	Revenue
21210070	Omkar Shivaji Salunkhe	iReminder: An iPhone App	Odd	Mr. Shreyas Shetty	Rs. 30,000/-
21510046	Saurabh Vijay Rajopadhye				
21510070	Aryan Prashant Magdum				



Figure 7.5.2: App delivery to esteemed client

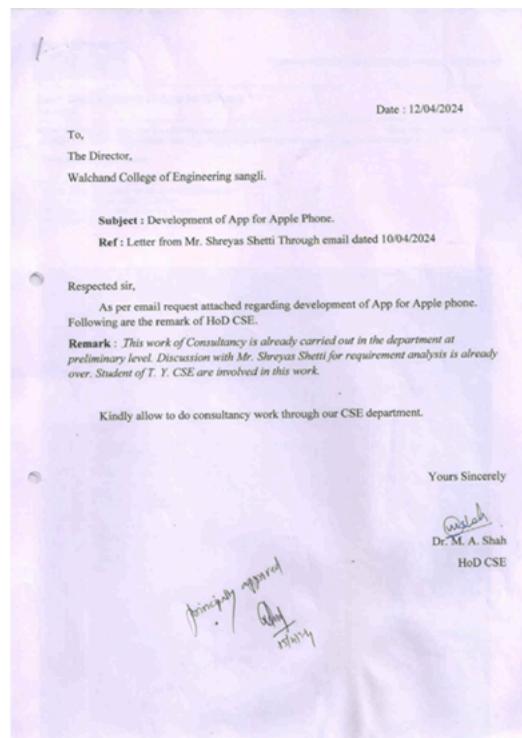


Figure 7.5.3 Consultancy approval letter from director

3. Value added course:

Under this CoE, the following value added course has been conducted for students within the institute and outside.

Table 7.5.4: Value added course utilizing Mac CoE

S. No.	Name of the course	Start date	End date	Number of participants
1	iOS Mobile App Development using Swift (1VA0039)	21st June 2024	20th July 2024	14

One of the issued certificates for this course is as follows:



Figure 7.5.4: Flyer for the value added course on iOS app development

4. Internship:

Winter internship in "iOS mobile app development using Swift" of 80 hours was offered by the Department of Computer Science and Engineering for Second year students for 2 credits in winter 2024-25 (16 Dec 2024-10 Jan 2025). Total students enrolled for internship were 57. This internship was conducted using the facility of Apple CoE.



Figure 7.5.5: Flyer for the internship program

PART E: First Year faculty and financial Resources

(Data to be filled in for the first year course faculty and budget allocation and utilization)

E1. First Year Student-Faculty Ratio (FYSFR)

Table No. E1.1: FYSFR details.

Year	Sanctioned intake of all UG programs (S4)	No. of required faculty (RF4= S4/20)	No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1)	No. of faculty members in Engineering Science Courses (NS2)	Percentage= No. of faculty members ((NS1*0.8) + (NS2*0.2))/(No. of required faculty (RF4)); Percentage=((NS1*0.8) + (NS2*0.2))/RF
2022-23(CAYm2)	390	20	6	69	93
2023-24(CAYm1)	390	20	7	88	116
2024-25(CAY)	660	33	12	103	92

E2. Budget Allocation, Utilization, and Public Accounting at Institute Level

Table No. E2.1: Budget and actual expenditure incurred at Institute level.

Items	Budgeted in 2024-2025	Actual Expenses in 2024-2025 till	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till
Infrastructure Built-Up	10000000	9139945	7500000	10016244	2500000	4418229	4000000	3143399
Library	3500000	1295225	3000000	2357952	2500000	3636554	4983000	2126004
Laboratory equipment	70000000	13316714	65800000	42620163	49000000	28122446	42500000	30390126
Teaching and non-teaching staff salary	355000000	280304250	360000000	353750071	370000000	371250999	330000000	324877014
Outreach Programs	2500000	1178000	2000000	1412056	300000	228636	200000	430640
R&D	2100000	1952974	2100000	760857	2400000	210817	2512000	70169
Training, Placement and Industry linkage	3500000	184000	1500000	221531	700000	146354	1200000	95380
SDGs	8629916	2349600	7046194	1715750	5573901	1418560	6096807	618825
Entrepreneurship	2000000	170806	2000000	377192	0	3633725	0	0
Others, Annual Events Expenses, Travel Expenses,	15500000	12777172	16450000	15593394	13950000	12994265	11900000	7759976
Total	472729916	322668686	467396194	428825210	446923901	426060585	403391807	369511533

E3. Budget Allocation, Utilization, and Public Accounting at Program Specific Level

Table No. E3.1: Budget and actual expenditure incurred at program level.

Items	Budgeted in 2024-2025	Actual Expenses in 2024-2025 till	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till
Laboratory equipment	3300000	5819566	6250000	7180187	5000000	3100000	5000000	1672547

Software	100000	155133	100000	84150	100000	66900	100000	1673380
SDGs	0	4830	0	0	0	0	0	0
Support for faculty development	100000	190993	100000	68610	100000	39020	49000	14400
R & D	100000	190254	100000	158443	200000	253727	200000	65224
Industrial Training, Industry expert, Internship	50000	21763	100000	12925	100000	124000	50000	37000
Miscellaneous Expenses*	250000	1249951	500000	1296031	500000	728252	410000	252589
Total	3900000	7632490	7150000	8800346	6000000	4311899	5809000	3715140