

Additional Information for QnM 1.3.2-

1.3.2.1: Number of courses that include experiential learning through project work/field work/internship during the year

The following summary table shows program-wise number of courses that include experiential learning

1.3 Curriculum Enrichment		
1.3.2 Number of courses that include experiential learning		
Sr No	Program Name	Number of Courses
1	Information Technology	12
2	Computer Engineering	10
3	Electronics Engineering	6
4	Electronics and Telecommunication Engineering	6
5	Biomedical Engineering	10
6	Master of Management Studies	6
	Total	50

Document showing the experimental learning through project work/field work/internship as prescribed by the affiliating university curriculum is as shown below.

This sample documents include-

- Project work in collaboration with outside organization
- Course Mini Project,
- Field work,
- Semester Mini Project

Other documents as per data template are uploaded on this link: <https://tinyurl.com/56m8tmu8>

Project work in collaboration with
outside organization: Biomedical
Engineering

List of Collaborative Projects 2021-22

Sr. No	Name of Students	Project Title	Project Guide	Collaborating Industry
1	Ishan Vatsaraj	Medical Diagnosis Chatbot	Dr. Gajanan Nagare	IIT Bombay+ Dynasense Technologies Pvt. Ltd.
	Sanika Thakur			
	Swara Surve			
2	Yash Rathod	Predictive Analysis on Polycystic Ovary Syndrome (PCOS)	Dr. Gajanan Nagare	Xstats
	Ruchita Ajgaonkar			
	Aryan Komare			
	Shruti Chindarkar			
3	Vedant Shirsekar	Skin diseases detection and remedial assistance using ML	Dr. Gajanan Nagare	IIT Bombay+ Dynasense Technologies Pvt. Ltd.
	Soham Urunkar			
	Swarit Mahalsekar			

Gm

**Department of Biomedical Engineering
Vidyalankar Institute of Technology,
Antop Hill, Wadala (E), Mumbai-37**



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रोहित श्रीवास्तव
प्राध्यापक एवं विभागाध्यक्ष
जैव विज्ञान एवं जैव अभियांत्रिकी विभाग
भारतीय प्रौद्योगिकी संस्थान मुंबई
पवई, मुंबई - 400076, भारत

IIT Bombay

Date: 20-06-2022

To whomsoever it may concern

This is to certify that **Ms. Swara Surve**, Undergraduate student of Vidyalankar Institute of Technology, Wadala, Mumbai of Biomedical Engineering Department participated and contributed to the project titled **Medical Diagnosis Chatbot** in our institute under my guidance and supervision.

External Guide's Signature

(Prof. Rohit Srivastava, FNASc, FRSC, FRSB, FNAE)
Himanshu Patel Chair Professor, Room 505
Department of Biosciences and Bioengineering
IIT Bombay, Powai, Mumbai 400076



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पवई, मुंबई - 400076, भारत

IIT Bombay

Date: 20-06-2022

To whomsoever it may concern

This is to certify that **Mr. SWARIT MAHALSEKAR**, Undergraduate student of Vidyalankar Institute of Technology, Wadala, Mumbai of Biomedical Engineering Department participated and contributed to the project titled **SKIN DISEASE DETECTION AND REMEDIAL ASSISTANCE** in our institute under my guidance and supervision.

External Guide's Signature

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पवई, मुंबई - 400076, भारत

IIT Bombay

Date: 20-06-2022

To whomsoever it may concern

This is to certify that **Mr. VEDANT SHIRSEKAR**, Undergraduate student of Vidyalankar Institute of Technology, Wadala, Mumbai of Biomedical Engineering Department participated and contributed to the project titled **SKIN DISEASE DETECTION AND REMEDIAL ASSISTANCE** in our institute under my guidance and supervision.

External Guide's Signature

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पवई, मुंबई - 400076, भारत

IIT Bombay

Date: 20-06-2022

To whomsoever it may concern

This is to certify that **Mr. Ishan Vatsaraj**, an undergraduate student of the Biomedical Engineering Department of Vidyalankar Institute of Technology, Wadala, Mumbai has successfully completed the project titled **Medical Diagnosis Chatbot** in our institute under my guidance and supervision.

He worked on different parts of the project and demonstrated exemplary skills in **Python, Machine Learning, HTML, and JavaScript.**

He is a diligent and enthusiastic student with a zeal to do his best on any assignment. He demonstrated good design and coding skills. He also assisted in technical documentation and modification.

He has excellent written and verbal communication skills. He is well organized and can work independently. He can effectively multi-task to ensure that all the assignments are looked after and duly completed in a professional and timely manner.

We wish him the very best for his career and future endeavours.

External Guide's Signature

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Himanshu Patel Chair Professor, Room 505
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IIT Bombay, Powai, Mumbai 400076



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पवई, मुंबई - 400076, भारत

IIT Bombay

Date: 20-06-2022

To whomsoever it may concern

This is to certify that **Ms. Sanika Thakur**, Undergraduate student of Vidyalankar Institute of Technology, Wadala, Mumbai of Biomedical Engineering Department participated and contributed to the project titled **Medical Diagnosis Chatbot** in our institute under my guidance and supervision.

External Guide's Signature

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Himanshu Patel Chair Professor, Room 505
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पवई, मुंबई - 400076, भारत

IIT Bombay

Date: 20-06-2022

To whomsoever it may concern

This is to certify that **Mr. SOHAM URUNKAR**, Undergraduate student of Vidyalankar Institute of Technology, Wadala, Mumbai of Biomedical Engineering Department participated and contributed to the project titled **SKIN DISEASE DETECTION AND REMEDIAL ASSISTANCE** in our institute under my guidance and supervision.

External Guide's Signature

(Prof. Rohit Srivastava, FNASc, FRSC, FRSB, FNAE)
Himanshu Patel Chair Professor, Room 505
Department of Biosciences and Bioengineering
IIT Bombay, Powai, Mumbai 400076



“This is to certify that Miss. Ruchita Ajgaonkar from Vidyalankar Institute of Technology, Mumbai has successfully completed internship program on Predictive Analysis of PCOS using ML under the guidance of Dr. Yogesh Karpate.

The duration of this project was from August 2021 to March 2022.

The internship on evaluation fulfills all the stated criteria and student’s findings are her original work.

We hereby certify her work excellent to the best of our knowledge”

Dr. Yogesh Karpate (Ph.D.)

CTO

Vanashri Kowase

HR



*“This is to certify that **Mr. Aryan Komare** from **Vidyalankar Institute of Technology, Mumbai** has successfully completed internship program on **Predictive Analysis of PCOS using ML** under the guidance of **Dr. Yogesh Karpate**.*

The duration of this project was from August 2021 to March 2022.

The internship on evaluation fulfills all the stated criteria and student’s findings are his original work.

We hereby certify his work excellent to the best of our knowledge”

Dr. Yogesh Karpate (Ph.D.)

CTO

Vanashri Kowase

HR



“This is to certify that Mr. Yash Rathod from Vidyalankar Institute of Technology, Mumbai has successfully completed internship program on Predictive Analysis of PCOS using ML under the guidance of Dr. Yogesh Karpate.

The duration of this project was from August 2021 to March 2022.

The internship on evaluation fulfills all the stated criteria and student’s findings are his original work.

We hereby certify his work excellent to the best of our knowledge”

Dr. Yogesh Karpate (Ph.D.)

CTO

Vanashri Kowase

HR



“This is to certify that Miss. Shruti Chindarkar from Vidyalankar Institute of Technology, Mumbai has successfully completed internship program on Predictive Analysis of PCOS using ML under the guidance of Dr. Yogesh Karpate.

The duration of this project was from August 2021 to March 2022.

The internship on evaluation fulfills all the stated criteria and student’s findings are her original work.

We hereby certify her work excellent to the best of our knowledge”

Dr. Yogesh Karpate (Ph.D.)

CTO

Vanashri Kowase

HR

Course Mini Project: Biomedical Engineering

Sem-3 Course: Digital Electronics (2021-22)

GROUP NUMBER	ROLL NUMBER	NAME	FINAL TOPIC	Marks
GROUP NO 1	20105A0022	Pratham Rajbhar		8
	20105A0010	Abel D'Souza	RPS game	7
	20105A0018	Khushi Shah		7
	20105A0003	Akshita Suresh		7
GROUP NO 2	20105A0001	Riya Modi	Traffic light controller	9
	20105A0040	Bhardwaj Nayak		8
	20105A0052	Shrikant Deshmukh		7
	20105A0004	Alsaz Khan		9
Group no 3	20105A0017	Niti Chikhale		9
	20105A0013	Abhay Barage	Traffic lights	9
	20105A0044	Rohan Utture		7
	20105A0021	Abhijit Gawai		2
Group no. 4	20105A0048	Manali Mhaskar		2
	20105A0019	Isha pande	Vending Machine	9
	20105A0012	Rutuja Shendage		8
	20105A0014	Sakshi Wagh		8
GROUP NO 5	20105A0039	Madhushree Thatte		8
	20105A0016	Sneha Tripathi		8
	20105A0011	Shrushti Shewale		8
	20105A0008	Khushi Kumbharde	7 segment display system	8
Group No.06	20105A0049	Pratiksha Sutar		7
	20105A0054	Rahul Patil	Rock paper scissor game	7
	20105A0050	Karuna Padwal		7
Group No.07	20105A0038	Suyash Ghanekar	2 way traffic light with pedestrian crossing	8
	20105A0031	Rutvik Sarvade		8
	20105A0046	Piyush Dalvi		8

	20105A0045	Vineet Patil		8
Group No.08	20105A0036	Ajay Kumar	Password security system	8
	20105A0034	Raviraj Suralkar		8
	20105A0027	Tanmay More		8
	20105A0037	Sahil Aute		8
Group No. 9	20105A0024	Tejaswi Yelgonda	Dual tone multi frequency (DTMF) bsd Home Automation	6
	20105A0028	Abhilasha Kurmi		6
	20105A0047	Prajay Bhalerao		6
	20105A0025	Durva Detke		6
Group No. 10	20105A0002	Ayushi Tanna	Gesture control Bluetooth speaker	9
	20105A0005	Freny Babaria		9
	20105A0009	Jay Sawant		9
	20105A0029	Harshdeep Patil		8
Group No. 11	20105A0026	Yojna vare		8
	20105A0041	Khushi Shinde	Fibonacci Series generator	0
	20105A0042	Raksha Amrutkar		6
	20105A0055	Ujwal Jadhav		8
Group no. 12	20105A0033	Yadnyesha Rane	Intrusion detection system for 3 rooms	0
	20105A0032	Sanika Nalawde		0
	20105A0015	Aditya Maluskar		0
	20105A0023	Paras Dhotre		0
Group no. 13	20105A0051	Apeksha Dalvi	Interactive LED surface.	0
	20105A0043	Abhinay karnale		0

Field Work: Biomedical Engineering

Virtual Tour to Reliance Hospital

Departments seen:

- ICU
- O.T.
- Radiology
- Casualty/Emergency
- Wards/Rooms

Equipments & Imaging Modalities seen:

1. LINAC – used for patients with cancer which uses high energy x-rays to find tumour
2. MRI -used to see the internal organs
3. Philips Imaging CT
4. SIMENS CT simulation

How many bedded hospitals -345 and what type of services are offered – multispeciality hospital

Images



Link of Hospital - <https://www.reliancehospitals.com/patients-visitors/virtual-tour/>

Semester Mini Project: Computer Engineering and Information Technology

Group No.	Roll No.	Division	Names	Topic Name
1	20102B0056	B	Sahil Sawant	Book Store
	20102B0022	B	Prem Patel	
	20102A0018	A	Shubham Shelatkar	
	20102A0034	A	Altamash Khan	
2	20102A0015	A	Aakanksha Karambele	Employee Management System
	20102A0040	A	Arya Chavarkar	
	20102B0039	B	Vaishali Ankam	
	20102B0040	B	Shrawani Dhodne	
3	20102A0006	A	Suyog Havare	Insurance Management System
	20102A0005	A	Yash Jagdale	
	20102A0057	A	Harsh Naiik	
4	20102A0058	A	Akshata Kadam	Message Encryptor-Decryptor
	20102A0024	A	Harsh More	
	20102A0029	A	Rutuja Patil	
5	20102B0002	B	Karthi Devendra	Space Shooter
	20102A0071	A	Mark John	
	20101A0003	B	Nitish Wadpally	
6	20102A0021	A	Kamlesh Sable	Bounce ball and Tetris Game
	20102A0033	A	Aryan Kokabankar	
	20102A0035	A	Niraj Koli	
7	20102B0070	B	Amit Sharma	Student Data Management System
	20102B0069	B	Dhruva Ludbe	
	20102A0048	A	Ritik Zambre	
8	20102B0035	B	Krunal Badgujar	Criminal Database Management system
	20102A0049	A	Rajat Amate	
	20102B0013	B	Sakshi Indulkar	
9	20102B0007	B	Ananthkrishnan Nair	A Snake game with Overworld in pygame
	20102B0014	B	Priyar Dupare	
	20102B0018	B	Aakash Vaishnav	
	20102B0006	B	Yash Malode	
10	20102A0065	A	Dipesh Rawal	Aerospace (plane shooter game)
	20102A0041	A	Tejas Barge	
	20102A0014	A	Satej Bhave	
	20102A0028	A	Madiha Rakhangi	
11	20102A0004	A	Trisha Shah	Hospital Management System
	20102A0012	A	Shipra Dagli	
	20102B055	B	Vaibhavi Raje	
	20102B057	B	Swathy Ayanggar	
12	20102B0011	B	Qasim Naik	Grocers: online grocery shopping GUI
	20102A0072	A	Chandan Patil	
	20102A0019	A	Vishal Patil	
	20102A0068	A	Sahil Chavhan	

13	20102B0001	B	Udit Mahajan	Quiz-Application with db-connected
	20102A0002	A	Rishi Sharma	
	20102A0001	B	Aditya Mawa	
14	20102A0038	A	Kunal Walavalkar	Tetris
	20102A0039	A	Kedar Walavalkar	
	20102A0013	A	Athang Munankar	
	20102A0011	A	Neel Gude	
15	20102B0017	B	Rohan Hazari	Space Invaders game
	20102B0020	B	Sanskriti Salunkhe	
16	21102A2006	A	Mandar Thakur	Tic Tac Toe Game
	21102B2002	B	Yash Uttarkar	
	20102B0021	B	Shubham Thakur	
	20102A0030	A	Sanal Ramane	
17	20102A0026	A	Akash Singh	Age and Gender Recognition using OpenCv
	20102A0054	A	Ishan Wagh	
18	20102B0066	B	Asad Ansari	Performing EDA on a dataset with python Libraries
	20102B0046	B	Suraj Mane	
19	20102B0019	B	Harshal Lokhande	Imagevault : An application to encrypt and decrypt sensitive images
	20102B0068	B	Spandan Malpani	
	20102B0071	B	Aadit Chavan	
	20102B0067	B	Yashraj Chavan	
20	21102B2001	B	Aayusha Shinde	Voice Assistant - Phoebe
	21102B2008	B	Reena Gupta	
	20102B0053	B	Gaurang Kalyankar	
	20102B0062	B	Rugved Tatkare	
21	20102A0046	A	Mayuresh Chavan	python stone paper scissors game
	20102B0005	B	Tanuj Ghag	
	20102B0031	B	Akshay Patil	
22	20102A0032	A	Vibodh Bhosure	Stock Price Predictor
	20102A0051	A	Prajwal Vaidya	
	20102B0016	B	Saarang More	
23	20102A0025	A	Nihal Mishra	library Management System
	20102B0047	B	Abhishek Jadhav	
	20102B0030	B	Sanika Dara	
24	20102A0056	A	Sanket Gaikwad	Bus Ticket Booking
	20102A0073	A	Sahil Bhoir	
	20102A0023	A	Siddhesh Varpe	
25	20102B0054	B	Aayush Pradhan	N Body Simulation
	21102B2006	B	Sanyog Jain	
	21102A2007	A	Shrishti Dogra	

TE Mini Project group- IT A

DIV	ROLL NO	Name of the Student	Name of Faculty
IT A1	19101A0026	Hussain Rampurawala	Dr.Vipul Dalal
	19101A0050	Shahid Afridi Mandal	
	19101A0060	Rahul Sakhalkar	
	19101A0066	Mudassir Ansari	
IT A2	19101A0044	Bhavesh Dhake	
	19101A0063	Chinmay Naphade	
	19101A0008	Chinmay Chavan	
	19101A0079	Rahul Pawar	
IT A3	20101A2002	Sukanya Kokani	
	18101A0021	Kirti Dhotre	
	18101A0074	Rahul chavan	
	18101A0069	Akshaj Salvi	
IT A4	19101A0024	Payal Gore	
	19101A0048	Anushree Dandekar	
	19101A0049	Rohini Malladi	
IT A5	20101A2003	Leon D'Souza	
	20101A2006	Arsheen Kazi	
	20101A2007	Samreen Kazi	
IT A6	19101A0053	Sanika Chavan	
	19101A0012	Mrunal Golatkar	
	19101A0061	Ankit Hooda	
	19101A0076	Surabhi Pathare	
IT A7	19101A0054	Viren Rajhauns	
	19101A0051	Alvin Pauly	
	19101A0043	Chaitanya Sawsakde	
	19101A0081	Omkar Narayankar	
IT A8	19101A0003	Shraddha Patil	
	19101A0042	Asmita Patil	
	19101A0040	Prachi Ingale	
	19101A0027	Anuja Bhosale	
IT A9	19101A0056	Ketan Chavan	
	19101A0038	Pranav Mane	
	19101A0052	Ashish Pal	
	19101A0030	Sourabh Lavate	
IT A10	19101A0039	Shweta dhage	
	19101A0031	Sheetal lubal	
	18101A0066	Kajal salgaokar	
	20101A2008	Abdullah pathan	
IT A11	19101A0013	Nikita Emberi	
	19101A0014	Akshaya Mohan	
	19101A0032	Nidhi Singh	
	19101A0073	Janhavi Kalwar	
	19103A0033	Atharvaa Rane	Prof. Akshay Loke

IT A12	19101A0041	Chinmay Ranade	Prof. Rohit Barve
	19101A0075	Hardik Bandekar	
	19101A0074	Riya Jadhav	
IT A13	19101A0078	Yash Mahajan	
	19101A0077	Pankaj Kataria	
	19101A0072	Anuj Kokane	
	19101A0047	Rishi Patankar	
IT A14	19101A0004	Mohit Santosh	
	19101A0004	Deepankar Bhade	
	19101A0028	Kaartik Nayak	
	19101A0029	Aman Singh	
IT A15	19101A0059	Rimjhim Kamble	
	19101A0062	Shalaka Sonawane	
	19101A0069	Unnati Gohil	
	19101A0010	Vaishnavi Pingale	
IT A16	19101A0057	Riddhi Warale	
	19101A0005	Prajakta Ghole	
	20101A2004	Rushikesh Patil	
	19101A0068	Jash Ratanghayra	
IT A17	19101A0055	Chetan Rathod	
	19101A0071	Sagar Kori	
	19101A0036	Sanket Sahu	
IT A18	20101A2009	Tirthesh Patil	
	20101A2010	Sanchit Jadhav	
	20101A2001	Sameep Sawant	
	20101A2005	Atharva Panvalkar	
IT A19	19101A0006	Akash Deep Singh	
	19101A0082	Adarsh Pakala	
	19101A0035	Siddharth Gaikwad	
	19101A0045	Vasu Bhat	
IA A20	19101A0058	Pratik Kadlak	
	17101A0078	Syed Aehtisham	
	19101A0037	Vrushali Gore	
	19101A0007	Sunita Bamble	
IT A21	19101A0025	Bijal Dharne	
	19101A0009	Naveen Shukla	
IT A22	19101A0011	Aakash Mahadik	
	19101A0064	Vaibhav Dhawale	
	17101A0074	Suhail Khan	
	15101A0047	Nikhil Dhangada	