



PRESIDENCY UNIVERSITY

(Established under the Presidency University Act, 2013 of the Karnataka Act 41 of 2013)

Name of the School: Engineering

Name of the Department: Chemistry

Area of Specialization: Materials Chemistry

Name of the Faculty Member(s): Dr. Aparna Roy

Title of the Value Added Course: Biomedical Engineering and Healthcare IT

Course Code: CHE V 004

Course Duration: 30 hours [From July 2020 to Aug 2020]

Introduction to the Course: Bioinformatics is a fusion of biology and IT. Students will learn to use computational analyses to study the vast information provided by modern molecular biology and medicine/healthcare. The course offers basic knowledge and training required to mine, process, simulate, and analyze biological and healthcare information. A thorough understanding of the content of this course will prepare the students to have the skills necessary to apply computing tools to address contemporary problems in biology and medicine.

Course Outcomes: On successful completion of the course the students shall be able to:

1. Describe structures of primary biomolecules such as DNA and protein, and representation of these molecular structures.
2. Discuss on basic statistical methods in biology
3. Explain the scope of IT and AI in healthcare sectors.

Course Content: Topics include Structure of DNA, RNA and Protein, Visualization of biomolecules, Biological Sequence Databases, Information Retrieval from Biological Databases, Sequence Similarity: BLAST and FASTA, Biostatistics and Computational tools for design of experiment, Healthcare IT services; Artificial intelligence in Healthcare, Digital medicine; Wearable Technology for Disease Diagnostics

Aparna Roy

Name & Signature of the Faculty Member(s)

Dr. Aparna Roy



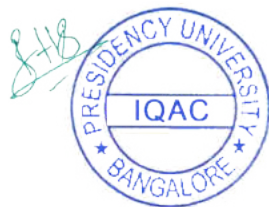
Anu Suchdev

Approval by the HOD



Presidency University, Bengaluru
Department of Chemistry
School of Engineering

VAC Student list for CHE V 004: Biomedical Engineering and Healthcare IT				
S.No.	STUDENT ID NO	STUDENT NAME	Login Id	Email Id
1	20191CCE0021	GOKUL M	20191CCE0021@presidencyuniversity.in	20191CCE0021@presidencyuniversity.in
2	20191CCE0026	K NIKITHA	20191CCE0026@presidencyuniversity.in	20191CCE0026@presidencyuniversity.in
3	20191CIV0012	CHAITRA J R	20191CIV0012@presidencyuniversity.in	20191CIV0012@presidencyuniversity.in
4	20191CIV0014	CHETHAN S	20191CIV0014@presidencyuniversity.in	20191CIV0014@presidencyuniversity.in
5	20191CIV0015	CHINNA MALLELA MANIDEEP	20191CIV0015@presidencyuniversity.in	20191CIV0015@presidencyuniversity.in
6	20191COM0028	BHAVANA G	20191COM0028@presidencyuniversity.in	20191COM0028@presidencyuniversity.in
7	20191COM0029	BHUVAN S	20191COM0029@presidencyuniversity.in	20191COM0029@presidencyuniversity.in
8	20191COM0032	BINGUMALLA SUDHEESH	20191COM0032@presidencyuniversity.in	20191COM0032@presidencyuniversity.in
9	20191COM0033	BODAYYAGARI MOUNIKA	20191COM0033@presidencyuniversity.in	20191COM0033@presidencyuniversity.in
10	20191COM0034	BUDDAREDDYGARI NITHEESHKUMAR	20191COM0034@presidencyuniversity.in	20191COM0034@presidencyuniversity.in
11	20191COM0036	BUSAGANI GURUDEEPAK	20191COM0036@presidencyuniversity.in	20191COM0036@presidencyuniversity.in
12	20191CSE0096	CHARAN KUMAR CL	20191CSE0096@presidencyuniversity.in	20191CSE0096@presidencyuniversity.in
13	20191CSE0099	CHINIMILLI JAGADEESH	20191CSE0099@presidencyuniversity.in	20191CSE0099@presidencyuniversity.in
14	20191CSE0100	CHINNAPPA NAIDU ANIL KUMAR DIS	20191CSE0100@presidencyuniversity.in	20191CSE0100@presidencyuniversity.in
15	20191CSE0102	CHINTHA RAGHU VAMSI KRISHNA RE	20191CSE0102@presidencyuniversity.in	20191CSE0102@presidencyuniversity.in
16	20191CSE0105	CHIRANTH S H	20191CSE0105@presidencyuniversity.in	20191CSE0105@presidencyuniversity.in
17	20191CSE0108	CHOWDAM MAHESH	20191CSE0108@presidencyuniversity.in	20191CSE0108@presidencyuniversity.in
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Aparna Roy
Signature of Course Instructor

Presidency University, Bengaluru
Value Added Course Marksheet
School of Engineering

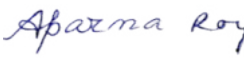
Course Code :		CHE V 004			Academic Year :		2020-2021	
Course Name :		Biomedical Engineering and Healthcare IT			Semester :		Even Semester	
					Instructor-in-Charge Name :		Dr. Aparna Roy	
					Instructor-in-Charge Employee ID :		PUNIV00909	
S. No	Roll No	Name	School School (e.g. SoE/SoL etc)	Attendance (in %)	Marks	Eligible for Certificate (Y/N)	Remark	
1	20191CCE0021	GOKUL M	SoE	93.33	100	Y		
2	20191CCE0026	K NIKITHA	SoE	90.00	100	Y		
3	20191CIV0012	CHAITRA J R	SoE	96.67	100	Y		
4	20191CIV0014	CHETHAN S	SoE	86.67	100	Y		
5	20191CIV0015	CHINNA MALLELA MANIDEEP	SoE	100.00	100	Y		
6	20191COM0028	BHAVANA G	SoE	100.00	100	Y		
7	20191COM0029	BHUVAN S	SoE	100.00	100	Y		
8	20191COM0032	BINGUMALLA SUDHEESH	SoE	100.00	100	Y		
9	20191COM0033	BODAYYAGARI MOUNIKA	SoE	100.00	100	Y		
10	20191COM0034	BUDDAREDDYGARI NITHEESHKUMAR REDDY	SoE	93.33	100	Y		
11	20191COM0036	BUSAGANI GURUDEEPAK	SoE	100.00	100	Y		
12	20191CSE0096	CHARAN KUMAR CL	SoE	90.00	100	Y		
13	20191CSE0099	CHINIMILLI JAGADEESH	SoE	100.00	100	Y		
14	20191CSE0100	CHINNAPPA NAIDU ANIL KUMAR DISHANTH	SoE	100.00	100	Y		
15	20191CSE0102	CHINTHA RAGHU VAMSI KRISHNA REDDY	SoE	100.00	100	Y		
16	20191CSE0105	CHIRANTH S H	SoE	100.00	100	Y		
17	20191CSE0108	CHOWDAM MAHESH	SoE	96.67	100	Y		
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Name of Course Instructor 1:

Dr. Aparna Roy

Employee ID of Course Instructor 1:

PUNIV00909



Signature of Instructor-in-Charge





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Name of the School: Engineering

Name of the Department: Chemistry

Area of Specialization: Materials Chemistry

Name of the Faculty Member(s): Dr.Saravanan C

Title of the Value Added Course: Polymer Science

Course Code: CHE V 010

Course Duration: 30 hours [From Sep 2019 to Dec 2020]

Introduction to the Course: The main objective of the course is to introduce the students to the concepts of applications of chemistry in Polymer technology. It should cultivate in them an ability to identify chemistry in finely engineered products used in households and industry. It aims to strengthen the fundamental concepts of chemistry and then builds an interface with the industrial applications. It deals with applied and industrially useful topics, such as fundamental of polymers, raw materials of polymers, polymerization techniques, polymer processing and characterization techniques.

Course Outcomes: On successful completion of the course the students shall be able to:

1. Relate the fundamentals of chemical sciences in development of polymeric materials.
2. Identify the polymerization techniques to synthesis the important engineering polymers.
3. Choose the right polymer processing technique and characterize the polymer materials.

Course Content: Topics include basic concepts & definitions: monomer & functionality, oligomer, polymer, repeating units, degree of polymerization, classification of polymers, Manufacturing of various fractions of crude petroleum products important for raw materials, Techniques of polymerization: bulk, solution, suspension, emulsion and plasma. Chain and Step growth polymerization. Processing and Characterization Techniques: Compounding of plastics, Basic of various processing techniques such as 1D process -Coating and Adhesives. Extruders, Calendaring, Thermoforming. Molding, Characterization Techniques: Thermal properties of polymers, Fourier transform infrared spectrometry, X-ray diffraction spectrometry. Molecular weight determination, Viscosity of polymer solutions and polymers, Mechanical properties.

C. Saravanan

Name & Signature of the Faculty Member(s)



Anu Srinivas

Approval by the HOD

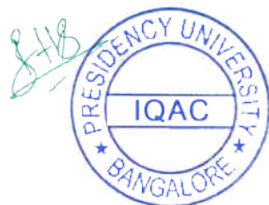


Presidency University, Bengaluru
Department of Chemistry
School of Engineering

VAC Student list for CHE V 010: Polymer Science				
S.No.	STUDENT ID NO	STUDENT NAME	Login Id	Email Id
1	20191CSE0110	D K CHETHANA	20191CSE0110@presidencyuniversity.in	20191CSE0110@presidencyuniversity.in
2	20191CSE0112	DAKKA CHANDRA KANTH	20191CSE0112@presidencyuniversity.in	20191CSE0112@presidencyuniversity.in
3	20191CSE0113	DAMMU RAM RAHUL	20191CSE0113@presidencyuniversity.in	20191CSE0113@presidencyuniversity.in
4	20191CSE0114	DARA VENKATA SAI VIVEK	20191CSE0114@presidencyuniversity.in	20191CSE0114@presidencyuniversity.in
5	20191CSE0115	DARSHAN C D	20191CSE0115@presidencyuniversity.in	20191CSE0115@presidencyuniversity.in
6	20191CSE0121	DEEPAK S MANNARATH	20191CSE0121@presidencyuniversity.in	20191CSE0121@presidencyuniversity.in
7	20191CSE0122	DEGAPUDI SUJANITH REDDY	20191CSE0122@presidencyuniversity.in	20191CSE0122@presidencyuniversity.in
8	20191CSE0124	DEVARAJA	20191CSE0124@presidencyuniversity.in	20191CSE0124@presidencyuniversity.in
9	20191CSE0125	DHANUSH B C	20191CSE0125@presidencyuniversity.in	20191CSE0125@presidencyuniversity.in
10	20191CSE0126	DHANUSH E	20191CSE0126@presidencyuniversity.in	20191CSE0126@presidencyuniversity.in
11	20191CSE0132	DILIP KUMAR M	20191CSE0132@presidencyuniversity.in	20191CSE0132@presidencyuniversity.in
12	20191CSE0133	DINESH SOLANKI G	20191CSE0133@presidencyuniversity.in	20191CSE0133@presidencyuniversity.in
13	20191CSE9002	SHARANYA	20191CSE9002@presidencyuniversity.in	20191CSE9002@presidencyuniversity.in
14	20191ECE0033	B HARITHA	20191ECE0033@presidencyuniversity.in	20191ECE0033@presidencyuniversity.in
15	20191ECE0034	B M ANIL KUMAR	20191ECE0034@presidencyuniversity.in	20191ECE0034@presidencyuniversity.in
16	20191ECE0035	B PAVAN KUMAR	20191ECE0035@presidencyuniversity.in	20191ECE0035@presidencyuniversity.in
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C. Sridhar

Signature of Course Instructor



Presidency University, Bengaluru
Value Added Course Marksheet
School of Engineering

Course Code :		CHE V 010		Academic Year :			2019-2020
Course Name :		Polymer Science		Semester :			Odd Semester
				Instructor-in-Charge Name :			Dr.Saravanan C
S. No	Roll No	Name	School (e.g. SoE/SoL etc)	Attendance (in %)	Marks	Eligible for Certificate (Y/N)	Remark
1	20191CSE011	D K CHETHANA	SoE	83.33	100	Y	
2	20191CSE011	DAKKA CHANDRA KANTH	SoE	86.67	100	Y	
3	20191CSE011	DAMMU RAM RAHUL	SoE	83.33	100	Y	
4	20191CSE011	DARA VENKATA SAI VIVEK	SoE	96.67	100	Y	
5	20191CSE011	DARSHAN C D	SoE	93.33	100	Y	
6	20191CSE012	DEEPAK S MANNARATH	SoE	86.67	100	Y	
7	20191CSE012	DEGAPUDI SUJANITH REDDY	SoE	86.67	100	Y	
8	20191CSE012	DEVARAJA	SoE	90.00	100	Y	
9	20191CSE012	DHANUSH B C	SoE	93.33	100	Y	
10	20191CSE012	DHANUSH E	SoE	90.00	100	Y	
11	20191CSE013	DILIP KUMAR M	SoE	93.33	100	Y	
12	20191CSE013	DINESH SOLANKI G	SoE	100.00	100	Y	
13	20191CSE900	SHARANYA	SoE	80.00	100	Y	
14	20191ECE003	B HARITHA	SoE	93.33	100	Y	
15	20191ECE003	B M ANIL KUMAR	SoE	83.33	100	Y	
16	20191ECE003	B PAVAN KUMAR	SoE	83.33	100	Y	

C. Saravanan

Signature of Instructor-in-Charge

