

B.Tech.
in
Biotechnology

COURSE AND CREDIT STRUCTURE



Department of Biotechnology
School of Engineering and Technology
SHARDA UNIVERSITY

SUMMARY SHEET

Teaching Department : Biotechnology (SET)
School : School of Engineering and Technology
Name of Course : B.Tech. in Biotechnology
Duration : Four Years
Total number of Credits : 160
Date of Meeting of BOS : June 12, 2018

Member of BOS:

1. Prof. Rita Singh Majumdar, Prof & HoD Chairperson
2. Dr. Shравan Kumar
Institute of Nuclear Medicine and Allied Science
DRDO Ext. Member
3. Dr. Neetu Kumar,
Department of Basic and Applied Science
NIFTEM Ext. Member
4. Dr V K Baranwal, Principle Scientist & Head
Dept. of Plant Pathology, IARI, PUSA Ext. Member
5. Prof Shahana Majumdar Int. Member
6. Dr Pankaj Taneja Int. Member
7. Dr Garima Chouhan Int. Member
8. Mrs. Monika Jain Int. Member

Status:

Approved


12/06/18

Dr. Shравan Kumar


12/6/18

Dr. Neetu K. Taneja


12/6/18

Prof. Rita S. Majumdar


(S. Majumdar)

AGENDA FOR BOS

Agenda 1: New course structure of B Tech in Biotechnology for all four years admitted in 2018 and minor updates in course structure of B Tech in Biotechnology admitted in 2016 and 2017.

Agenda 2: Course structure of B Tech- M Tech Integrated in Plant Biotechnology and Course structure of B Tech- M Tech Integrated in Animal Biotechnology

Agenda 3: Approval of new courses.

- Python is a High level language of programming for software development. B. Tech (Biotechnology) student are user's not developers. In place of this more of open source database and analytical tools may add.


12/06/18.

Course Structure for B.Tech. Biotechnology Batch 2018-19 onwards

COURSE STRUCTURE												CRS	L	T	P	Contact Hours/Week	Credits
I	Introduction to Engineering (0-0-2)1	Programming for Problem Solving (2-0-4)4	Environmental Science (2-0-0)2	Maths I (3-1-0)4	Engineering Physics (2-1-2)4	Computer Aided Design & Drafting (0-0-3)1.5	Principles of Electrical and Electronics Engineering (2-1-2)	Soft Skill - 1 (0-0-4)2	8	11	3	17	31	22.5			
	Application based Programming in Python (2-0-4)4	Biostatistics (3-1-0)4	Advanced Physics (2-1-2)4	Engineering Chemistry (3-0-2)4	Mechanical Workshop (0-0-3)1.5	Soft Skill - 2 (1-0-2)2	Design/Creativity based course (0-0-2)1		7	13	2	15	28	22.5			
II	CTS-1 Building Essential Language and Life Skill (0-0-4)2	Open source software (2-0-0)2	Organic chemistry (3-0-2)4	Immunology (3-0-0)3	Cell Biology (3-0-2)4	Genetics (3-0-0)3	Project based learning 1 (0-0-2)1	Industrial Internship (0-0-2)1	8	14	1	12	27	20			
	CTS-2 Communicate to Conquer (0-0-4)2	Microbiology (3-0-2)4	Molecular Biology (3-1-2)5	Biochemistry (3-0-0)3	Instrumentation and Bioanalytical Techniques (3-0-2)4	Management Course (3-0-0)3	Project based learning 2 (0-0-2)1		7	15	1	12	28	22			
V	CTS-3 Impress 2 Impact (0-0-4)2	Basic Plant Biotechnology (3-0-2)4	Recombinant DNA Technology (3-0-2)4	Animal Biotechnology (3-0-0)3	Program Elective-1 (3-0-0)3	Project based learning 3 (0-0-2)1	Open Elective - 1 (3-0-0)3	Industrial Internship (0-0-2)1	9	15		14	29	22			
	CTS-4 Ace the Interview (0-0-4)2	Bioprocess Engineering (3-0-2)4	Signal Transduction (3-0-0)3	Technical Skill Enhancement Course-2 (0-0-2)1	Program Elective-2 (3-0-0)3	Program Elective-3 (3-0-0)3	Project based learning 4 (0-0-2)1	Open Elective - 2 (3-0-0)3	8	15		10	25	20			
VII	CTS-5 Campus to Corporate (0-0-2)1	Program Elective-5 (3-0-0)3	Major Project-1 (0-0-6)3	Industrial Internship (0-0-2)1	Program Elective-4 (3-0-0)3	Open Elective - 3 (2-0-0)2	Comprehensive Examination (0-0-0)0	Professional Ethics and Values (0-0-0)0	8	8		10	18	13			
	Major Project - 2 (0-0-18)9	Program Elective-6 (3-0-0)3	Program Elective-7 (3-0-0)3	Program Elective-7 (3-0-0)3	Open Elective - 4 (3-0-0)3				4	9		18	27	18			
TOTAL																	160


 Prof. T. S. S. S. S.
 12/10/18

List of Electives

1	Food Microbiology
2	Dairy Technology
3	Virology
4	Basic Computational Biology
5	Analysis of gene and genome
6	Biosafety regulation and IPR
7	Bio-Pharmaceuticals
8	Stem cells
9	Biophysics
10	Downstream Processing
11	Biochemical engineering
12	Environmental Biotechnology
13	Current advances in toxicology
14	Waste Management
15	Molecular Plant Pathology
16	Enzymology

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