

Date: 15-03-2021

### Change Summary Document

Change summary between 2015-16 and 2016-17 admitted batches  
(i.e. 2015 to 19 batch 2016 to 20 batch)

DEPT: BIOTECHNOLOGY

Semester	Course Name	Total Hours	Revision Hrs	% Change	Year of Implementation
I	Engineering Exploration	78	56	72	2016-2017
II	Physics Lab 16EPHP102	20	14	70	2016-17
	Social Innovation 16EHSP101	64	60	94	2016-17
III	Biochemistry	50	20	40	2017-18
IV	Enzyme Technology	50	20	40	2017-18
V					
VI	Bioprocess Plant Design and Economics	40	40	100%	2018-19
VII	Environmental Biotechnology	40	40	100%	2018-19
VIII					
Total			250		

Evidence enclosed:

*Schemes of 2015-19 batch and 2016-20 batch with changes shown in different colour*

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## Change Summary Document

**Change summary between 2016-17 and 2017-18 admitted batches  
(i.e. 2016 to 20 batch 2017 to 21 batch)**

**DEPT: BIOTECHNOLOGY**

Semester	Course Name	Total Hours	Revision Hrs	% Change	Year of Implementation
I					
II					
III					
IV					
V	Bioinformatics	50	10	20%	2019-20
VI	Bioprocess Control & Automation	50	10	20%	2019-20
	Bioprocess Modeling and simulation	40	40	100%	2019-20
VII	Downstream Processing Technology	50	10	20%	2020-21
	Project Work	18	40	100%	2020-21
	Bioethics, safety and IPR	40	40	100%	2020-21
	Industrial Biotechnology	40	10	25%	2020-21
VIII	Bio-business and entrepreneurship	40	40	100%	2020-21
Total			200		

**Evidence enclosed:**

***Schemes of 2016-20 batch and 2017-21 batch with changes shown in different colour***

  
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## Change Summary Document

Change summary between 2017-18 and 2018-19 admitted batches  
(i.e. 2017 to 21 batch 2018 to 22 batch)

**DEPT: BIOTECHNOLOGY**

Semester	Course Name	Total Hours	Revision Hrs	% Change	Year of Implementation
I	Single Variable Calculus 18EMAB101	60	40	67	2018-19
	Basic Electronics 18EECF101	50	13	26	2018-19
II	Basic Electrical Engg 18EEEF102	50	15	30	2018-19
	Multivariable Calculus 18EMAB102	60	32	53	2018-19
III					
IV					
V					
VI					
VII					
VIII					
Total			100		

**Evidence enclosed:**

***Schemes of 2017-21 batch and 2018-22 batch with changes shown in different colour***



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## Change Summary Document

Change summary between 2018-19 and 2019-20 admitted batches  
(i.e. 2018 to 22 batch 2019 to 23 batch)

DEPT: BIOTECHNOLOGY

Semester	Course Name	Total Hours	Revision Hrs	% Change	Year of Implementation
I					
II					
III	Numerical Methods and Differential Equations	50	20	40%	2020-21
IV	Biostatistics	40	10	25%	2020-21
V					
VI					
VII					
VIII					
Total			30		

Evidence enclosed:

*Schemes of 2018-22 batch and 2019-23 batch with changes shown in different colour*

  
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DEPT: BIOTECHNOLOGY

Total number of courses	No of courses with significant changes	Total number of Revision Hours	Percentage Change
60	21	580	35 %

  
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