



DATTA MEGHE INSTITUTE OF HIGHER EDUCATION & RESEARCH

[Declared as Deemed-to-be-University]

[Formerly known as Datta Meghe Institute of Medical Sciences (Deemed to be University)]

Conferred 'A' Grade status by H.R.D. Ministry Govt. of India.

Re-accredited by NAAC (3rd Cycle) with 'A+' Grade

Office: **Sawangi (Meghe), Wardha - 442 107, Maharashtra, India**

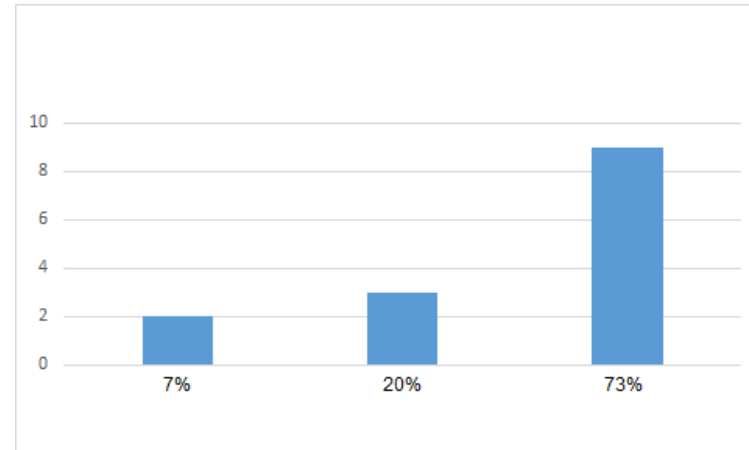
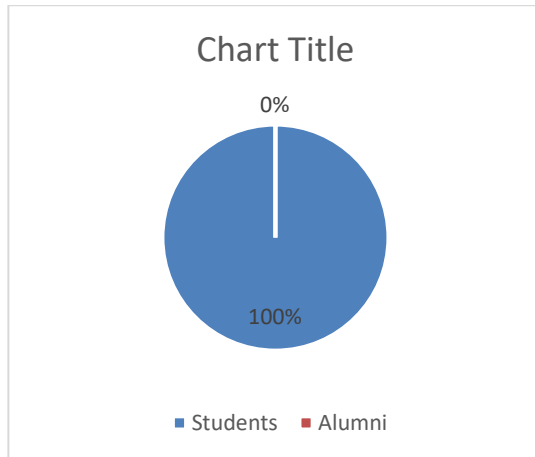
Ph. No. : 07152 - 287701-06 Email: info@dmihher.edu.in Website: www.dmihher.edu.in

Faculty of Engineering and Technology

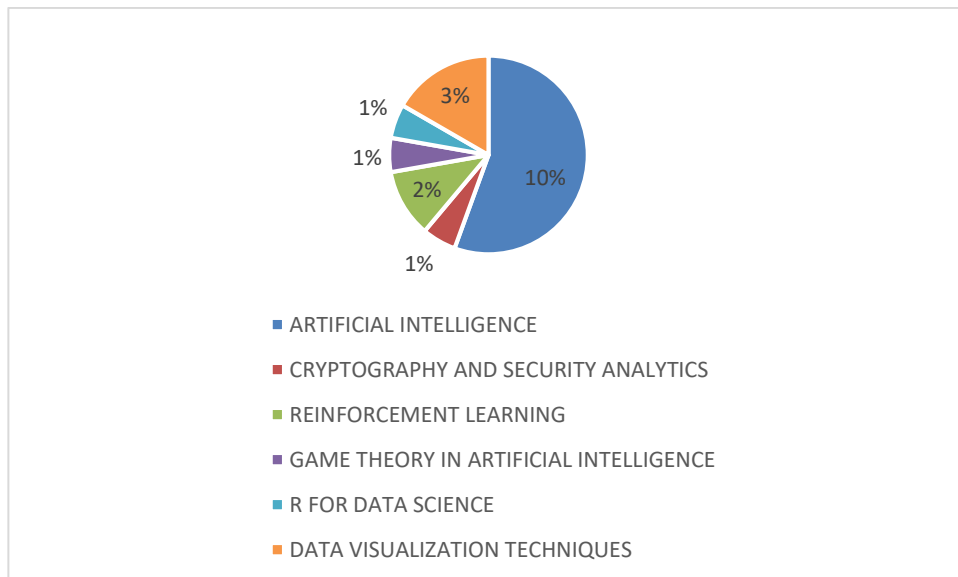
Feedback analysis of Post-Graduate Curriculum

Year of revision: 2022-2023

Evaluation: Student/ Alumni



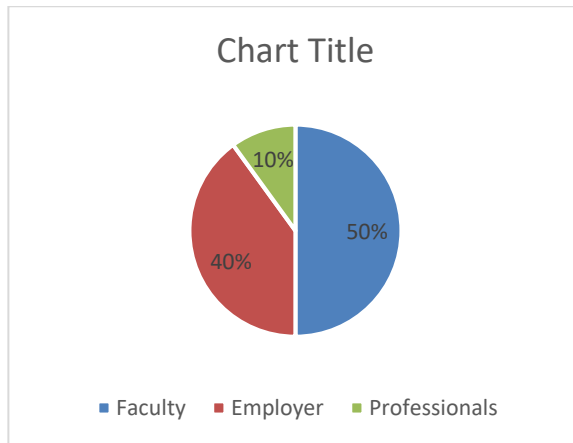
The content of this subject was prepared as per local, regional & national health needs



List the changes

- Introduction- Problem Solving: state space search and control strategies.
- Problem reduction and Game playing, Logic concepts and logic programming
- Advanced problem-solving paradigm: - planning Knowledge representation
- Thinking differently, Lateral thinking, Mind stimulation: games, brain-twisters and puzzles
- Idea-collection processes Brainstorming/Brain writing, The SCAMPER methods, Metaphoric thinking,
- Outrageous thinking, Mapping thoughts, other (new approaches).
- Data: Types of data and preprocessing/visualization, Unsupervised learning: clustering,
- Supervised learning: decision trees, soft-margin support-vector machines, neural networks, one-class,
- semi-supervised and multi-criteria learning, incremental classification, NLP
- HMMs and incremental HMMs, basic definitions and applications of NLP tasks
- WordNet, semantic feature selection
- Deep Q-networks (DQN, DDQN, Dueling DQN, Prioritized Experience Replay)
- Model-based RL approach
- GANs, Generative Models - HMM, RBM
- Data organization, Arrays and Matrices
- Evaluating and Validating models, Probability distributions in R
- Introduction to data visualization, Data for data graphics, Tableau introduction
- Design principles, Categorical, time series, and statistical, data graphics
- Storytelling, Multivariate display
- Geospatial displays
- Histograms, Aggregating Data with Group-By Hexbin Mapping, Cros1s filtering
- Overview of Business Analytics, Introduction to Analytics, Competing on Analytics
- Organization/sources of data, Importance of data quality, Dealing with missing or incomplete data, Data
- Introduction to Data Mining, Data Mining Process
- Data mining tool XLMiner.
- Use of Excel to solve business problems: e.g., marketing mix, capital budgeting, portfolio optimization
- Types of problems: inventory management, capital investment analysis, market share estimation

Evaluation: Faculty/Employer/Professional



To the subject experts the communication was through email. A sample is shown

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Fwd: suggestion Regarding the syllabus of the M.Tech BME Inbox x ✕ 🖨️ 📧

R **Rajendra Rewatkar** 11:40 AM (3 minutes ago) ☆ ↶ ⋮
to me ▾

----- Forwarded message -----
From: **Rajendra Rewatkar** <rajendrar.feat@dmihir.edu.in>
Date: Thu, Apr 27, 2023 at 5:11 AM
Subject: suggestion Regarding the syllabus of the M.Tech BME
To: Principal xtech <principal@xaviertech.com>

Respected Sir,
I attached herewith the syllabus and scheme of the M.Tech Biomedical Engineering in Faculty of Engineering and Technology.
I request you to kindly go through it and suggest the changes in the subjects,unit ,contents,practicals and electives if required.Once your suggestions received,we can add or delete that much part of the syllabus.
If some changes are required in the syllabus/scheme then we will approve the same in the BoS meeting which is scheduled on April 29,2023.
Kindly do the needful.

Thanks and Regards,

Dr.Rajendra Rewatkar

Reply

----- Forwarded message -----

From: Principal xtech <principal@xaviertech.com>

Date: Thu, Apr 27, 2023 at 5:27 AM

Subject: Re: suggestion Regarding the syllabus of the M.Tech BME

To: Rajendra Rewatkar <rajendrar.feat@dmihir.edu.in>

Ok, I will check.

...

↩ Reply

➦ Forward

After this the expert had a telephonic conversation with the HOD and suggested the following changes.

1. List of experiments to be enhanced
2. Modify the curriculum according to the industry requirements.

ARTIFICIAL INTELLIGENCE

a. Subject-wise analysis of feedback:

Subject-wise Analysis of feedback:

Specific Suggestions of various Stakeholders

Stakeholder	Suggestions
Students	<ul style="list-style-type: none">• Introduction: - Problem solving: state space search and control strategies.• Problem reduction and Game playing, Logic concepts and logic programming• Advanced problem-solving paradigm: - planning Knowledge representation.
Faculty	<ul style="list-style-type: none">• Thinking differently, Lateral thinking, Mind stimulation: games, brain-twisters and puzzles, Idea-collection processes, Brainstorming/Brain writing, The SCAMPER methods, Metaphoric thinking,• Outrageous thinking, Mapping thoughts, other (new approaches)
Professional/ Employer	<ul style="list-style-type: none">• List of Experiments need to be modified

Generic Revisions in Curriculum based on Stakeholders' Feedback

- Modify to syllabus as per industry need
- Change few experiments.

Recommendations of DCCB.O.S.BOS on stakeholders' feedback for Curriculum Revision

Areas of Curriculum Revision	Recommendations DCC & BOS	Percentage of Curriculum Revised
Course Content	<p>The following suggested points must be incorporated in the curriculum revision:</p> <ul style="list-style-type: none"> • Basic concepts, techniques, and principles of AI, including problem-solving, search algorithms, knowledge representation, and machine learning • Natural Language Processing, Computer Vision, Robotics, Health Care, Finance, Education, Research. • Uninformed Search Algorithms, Informed Search Algorithms, Constraint Satisfaction, Adversarial Search, Evolutionary Algorithms 	8%
Outcome-based education	Identification of post Graduate attributes, Program Outcomes, Course Outcomes and mapping of CO-PO	1%
Scheme of Assessment	No changes in the assessment pattern	
TL Methodology	<ul style="list-style-type: none"> • More hands on sessions to be carried out 	1%
Total Curriculum Revision		10%

ACTION TAKEN REPORT

Stakeholder	Specific Observations from feedback	Action Taken			
		Topic (Addition/Modification)	Core Value	Domain	% Of Revision
Students	Problem reduction and Game playing	Modified to Computer Vision, Robotics, Health Care, Finance, Education, and Research.	National, Regional	Cognitive/ Psychomotor/ /Affective	10%
Faculty	Thinking differently and Lateral thinking	Evolutionary Algorithms	National, Regional	Cognitive/ Psychomotor/ /Affective	
	Generic observations from feedback				
Student/ Alumina/ Faculty/ Professional/ Employer	Identified topics that were generic and obsolete and replaced with relevant topics	Knowledge representation, and machine learning			10%

CRYPTOGRAPHY AND SECURITY ANALYTICS

b. Subject-wise analysis of feedback:

Subject-wise Analysis of feedback:

Specific Suggestions of various Stakeholders

Stakeholder	Suggestions
Students	<ul style="list-style-type: none">• Data: Types of data and preprocessing/visualization, Unsupervised learning: clustering, Supervised Learning• Decision trees, soft-margin support-vector machines, neural networks, one-class• Semi-supervised and multi-criteria learning, incremental classification,
Faculty	<ul style="list-style-type: none">• NLP: Markov chain models including• HMMs and incremental HMMs, basic definitions and applications of NLP tasks such as part-of-speech tagging and word-sense disambiguation, WordNet, semantic feature selection
Professional/ Employer	<ul style="list-style-type: none">• Case study to be included

Generic Revisions in Curriculum based on Stakeholders' Feedback

- Modify to syllabus as per industry need
- Change few experiments.

Recommendations of DCCB.O.S.BOS on stakeholders' feedback for Curriculum Revision

Areas of Curriculum Revision	Recommendations DCC & BOS	Percentage of Curriculum Revised
Course Content	The following suggested points must be incorporated in the curriculum revision: <ul style="list-style-type: none"> • Number Theory and Algebraic Structures, Public Key Cryptography, Digital Signatures • Hash Functions, Applications of Public Key Cryptography, Cryptographic Protocols, Cryptographic Attacks and Countermeasures 	1%
Outcome-based education	Identification of post Graduate attributes, Program Outcomes, Course Outcomes and mapping of CO-PO	0%
Scheme of Assessment	No changes in the assessment pattern	
TL Methodology	<ul style="list-style-type: none"> • More hands on sessions to be carried out 	0%
Total Curriculum Revision		1%

ACTION TAKEN REPORT

Stakeholder	Specific Observations from feedback	Action Taken			
		Topic (Addition/Modification)	Core Value	Domain	% Of Revision
Students	Data and Types of data	Number Theory and Algebraic Structure	National, Regional	Cognitive/ Psychomotor/ /Affective	1%
Faculty	Natural Language Processing	Cryptography	National, Regional	Cognitive/ Psychomotor/ /Affective	
	Generic observations from feedback				
Student/ Alumina/ Faculty/ Professional/ Employer	Identified topics that were generic and obsolete and replaced with relevant topics	Knowledge representation, and machine learning			1%

REINFORCEMENT LEARNING

c. Subject-wise analysis of feedback: Subject-wise Analysis of feedback:

Specific Suggestions of various Stakeholders

Stakeholder	Suggestions
Students	<ul style="list-style-type: none">• Model-based RL approach
Faculty	<ul style="list-style-type: none">• Deep Q-networks (DQN, DDQN)• Dueling DQN• Prioritized Experience Replay
Professional/ Employer	<ul style="list-style-type: none">• Case study to be included

Generic Revisions in Curriculum based on Stakeholders' Feedback

- Modify to syllabus as per industry need
- Change few experiments.

Recommendations of DCCB.O.S.BOS on stakeholders' feedback for Curriculum Revision

Areas of Curriculum Revision	Recommendations DCC & BOS	Percentage of Curriculum Revised
Course Content	The following suggested points must be incorporated in the curriculum revision: <ul style="list-style-type: none"> • Q-Learning, Markov Decision Processes, Bellman Equation, Exploration-Exploitation Dilemma, Function • Approximation, Policy Gradient Methods, Monte Carlo Methods, Multi-agent Reinforcement Learning, • Applications of Q-Networks • Dynamic Programming, Monte Carlo Methods, Temporal Difference Learning, Model-Based RL • Algorithms, Exploration-Exploitation Trade-off, Applications of Model-Based RL 	1%
Outcome-based education	Identification of post Graduate attributes, Program Outcomes, Course Outcomes and mapping of CO-PO	1%
Scheme of Assessment	No changes in the assessment pattern	
Total Curriculum Revision		2%

ACTION TAKEN REPORT

Stakeholder	Specific Observations from feedback	Action Taken			
		Topic (Addition/Modification)	Core Value	Domain	% Of Revision
Students	Model-based RL approach	Monte Carlo Methods, Multi-agent	National, Regional	Cognitive/ Psychomotor/ /Affective	2%
Faculty	Deep Q-networks	Q-Learning.	National, Regional	Cognitive/ Psychomotor/ /Affective	
	Generic observations from feedback				
Student/ Alumina/ Faculty/ Professional/ Employer	Identified topics that were generic and obsolete and replaced with relevant topics	Knowledge representation, and machine learning			2%

GAME THEORY IN ARTIFICIAL INTELLIGENCE

d. Subject-wise analysis of feedback: Subject-wise Analysis of feedback:

Specific Suggestions of various Stakeholders

Stakeholder	Suggestions
Students	<ul style="list-style-type: none">• GANs topics to be elaborated.
Faculty	<ul style="list-style-type: none">• Generative Models - HMM, RBM to be elaborated
Professional/ Employer	<ul style="list-style-type: none">• Use case to be included

Generic Revisions in Curriculum based on Stakeholders' Feedback

- Modify to syllabus as per industry need
- Change few experiments.

Recommendations of DCCB.O.S.BOS on stakeholders' feedback for Curriculum Revision

Areas of Curriculum Revision	Recommendations DCC & BOS	Percentage of Curriculum Revised
Course Content	The following suggested points must be incorporated in the curriculum revision: <ul style="list-style-type: none"> • Generative Adversarial Networks • Flow-Based Models • Auto-Regressive Models • Probabilistic Modeling 	1%
Outcome-based education	Identification of post Graduate attributes, Program Outcomes, Course Outcomes and mapping of CO-PO	0%
Scheme of Assessment	No changes in the assessment pattern	
Total Curriculum Revision		1%

ACTION TAKEN REPORT

Stakeholder	Specific Observations from feedback	Action Taken			
		Topic (Addition/Modification)	Core Value	Domain	% Of Revision
Students	Generative Adversarial Networks	Probabilistic Modeling	National, Regional	Cognitive/ Psychomotor/ /Affective	1%
Faculty	GAN Models	<ul style="list-style-type: none"> • Flow-Based Models • Auto-Regressive Models 	National, Regional	Cognitive/ Psychomotor/ /Affective	
	Generic observations from feedback				
Student/ Alumina/ Faculty/ Professional/ Employer	Identified topics that were generic and obsolete and replaced with relevant topics	Knowledge representation, and machine learning			1%

R FOR DATA SCIENCE

e. **Subject-wise analysis of feedback:**

Specific Suggestions of various Stakeholders

Stakeholder	Suggestions
Students	<ul style="list-style-type: none">• Data organization, Arrays and Matrices.
Faculty	<ul style="list-style-type: none">• Evaluating and Validating models, Probability distributions in R
Professional/ Employer	<ul style="list-style-type: none">• List of Experiments need to be modified

Generic Revisions in Curriculum based on Stakeholders' Feedback

- Modify to syllabus as per industry need
- Change few experiments.

Recommendations of DCCB.O.S.BOS on stakeholders' feedback for Curriculum Revision

Areas of Curriculum Revision	Recommendations DCC & BOS	Percentage of Curriculum Revised
Course Content	The following suggested points must be incorporated in the curriculum revision: <ul style="list-style-type: none"> • Data Import and Export, Data Cleaning and Pre-processing, Data Wrangling with dplyr, Data Visualization with ggplot2: Data Organization with tidyr, Data Manipulation with stringr, Data Organization with lubridate • How various statistical and mathematical models can be mapped to machine learning techniques, including linear regression, logistic regression, decision trees, and random forests. 	1%
Outcome-based education	Identification of post Graduate attributes, Program Outcomes, Course Outcomes and mapping of CO-PO	0%
Scheme of Assessment	No changes in the assessment pattern	
Total Curriculum Revision		1%

ACTION TAKEN REPORT

Stakeholder	Specific Observations from feedback	Action Taken			
		Topic (Addition/Modification)	Core Value	Domain	% Of Revision
Students	Data organization	Data Import and Export	National, Regional	Cognitive/ Psychomotor/ /Affective	1%
Faculty	Probability distributions	Statistical and Mathematical models	National, Regional	Cognitive/ Psychomotor/ /Affective	
	Generic observations from feedback				
Student/ Alumina/ Faculty/ Professional/ Employer	Identified topics that were generic and obsolete and replaced with relevant topics	Knowledge representation, and machine learning			1%

DATA VISUALIZATION TECHNIQUES

f. Subject-wise analysis of feedback:

Specific Suggestions of various Stakeholders

Stakeholder	Suggestions
Students	<ul style="list-style-type: none">• Introduction to data visualization, Data for data graphics, Tableau introduction• Design principles, Categorical, time series, and statistical, data graphics
Faculty	<ul style="list-style-type: none">• Storytelling, Multivariate displays• Geospatial displays
Professional/ Employer	<ul style="list-style-type: none">• List of Experiments need to be modified

Generic Revisions in Curriculum based on Stakeholders' Feedback

- Modify to syllabus as per industry need
- Change few experiments.

Recommendations of DCCB.O.S.BOS on stakeholders' feedback for Curriculum Revision

Areas of Curriculum Revision	Recommendations DCC & BOS	Percentage of Curriculum Revised
Course Content	<p>The following suggested points must be incorporated in the curriculum revision:</p> <ul style="list-style-type: none"> • Basic principles of data visualization, Types of visualization, Choosing appropriate visualization techniques, Visualization tools and software • Basic design concepts such as layout, color, and typography • Introduction to Geospatial Displays in Data Visualization, Geospatial Data Processing with GeoPandas, Interactive Geospatial Visualizations with Folium, Advanced Geospatial Visualization Techniques with Plotly. • Principal Component Analysis (PCA), t-Distributed Stochastic Neighbor Embedding (t-SNE), Independent Component Analysis (ICA), Linear Discriminant Analysis (LDA) 	2%
Outcome-based education	Identification of post Graduate attributes, Program Outcomes, Course Outcomes and mapping of CO-PO	1%
Scheme of Assessment	No changes in the assessment pattern	
Total Curriculum Revision		3%

ACTION TAKEN REPORT

Stakeholder	Specific Observations from feedback	Action Taken			
		Topic (Addition/Modification)	Core Value	Domain	% Of Revision
Students	introduction	Visualization tools and software	National, Regional	Cognitive/ Psychomotor/ /Affective	3%
Faculty	Multivariate displays	Advanced Visualization Techniques with Plotly	National, Regional	Cognitive/ Psychomotor/ /Affective	
	Generic observations from feedback				
Student/ Alumina/ Faculty/ Professional/ Employer	Identified topics that were generic and obsolete and replaced with relevant topics	Knowledge representation, and machine learning			3%



**Registrar
DMIHER (DU)**

REGISTRAR
Datta Meghe Institute of Higher Education &
Research (Deemed to be University)
Sawangi (Meghe), WARDHA-442107 (M.S.)



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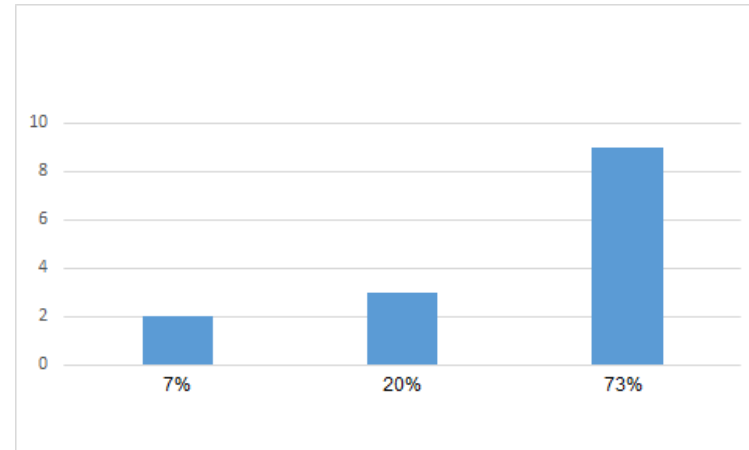
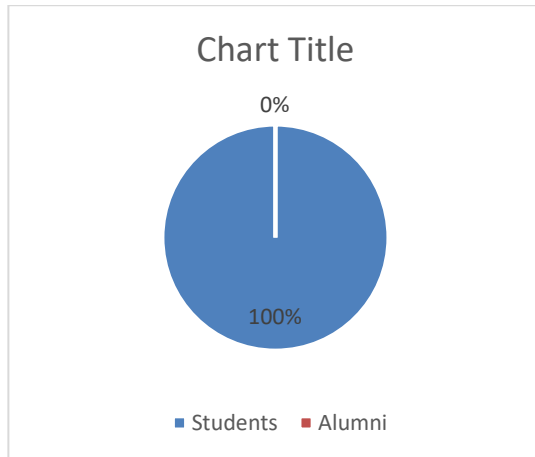
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Faculty of Engineering and Technology

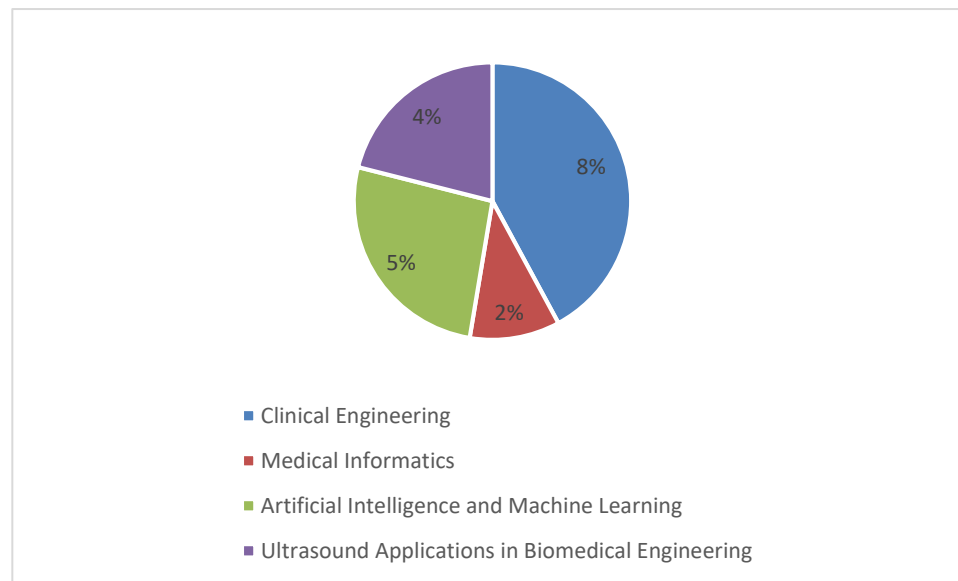
Feedback analysis of Post-Graduate Curriculum

Year of revision: 2022-2023

Evaluation: Student/ Alumni



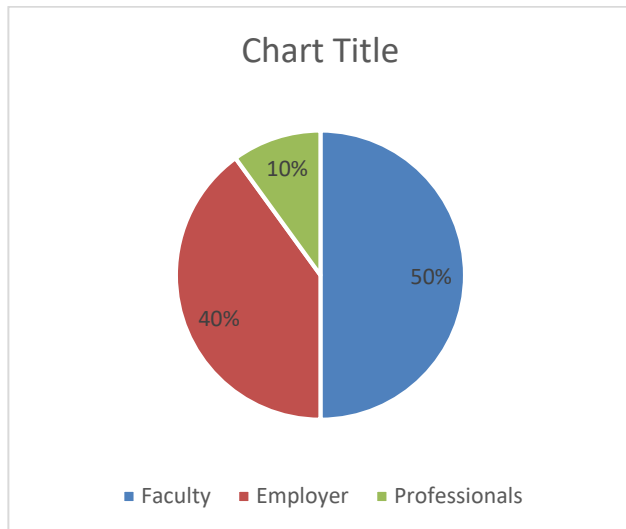
The content of this subject was prepared as per local, regional & national health needs



List the changes

- Clinical Engineering evolution
- Healthcare environment
- Patient care systems
- Patient Monitoring Systems
- Data science
- Data analytics
- Machine learning
- Artificial Intelligence
- AI in your company
- AI and society
- Role of Data Science
- Sonography
- Quantitative measurements such as tissue characterization.

Evaluation: Faculty/Employer/Professional



To the subject experts the communication was through email. A sample is shown

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Fwd: suggestion Regarding the syllabus of the M.Tech BME Inbox x ✕ 🖨️ 📄

R **Rajendra Rewatkar**
to me ▾ 📧 11:40AM (3 minutes ago) ☆ ↻ ⋮

----- Forwarded message -----
From: **Rajendra Rewatkar** <rajendrar.feat@dmihir.edu.in>
Date: Thu, Apr 27, 2023 at 5:11 AM
Subject: suggestion Regarding the syllabus of the M.Tech BME
To: Principal xtech <principal@xaviertech.com>

Respected Sir,
I attached herewith the syllabus and scheme of the M.Tech Biomedical Engineering in Faculty of Engineering and Technology.
I request you to kindly go through it and suggest the changes in the subjects,unit , contents,practicals and electives if required.Once your suggestions received,we can add or delete that much part of the syllabus.
If some changes are required in the syllabus/scheme then we will approve the same in the BoS meeting which is scheduled on April 29,2023.
Kindly do the needful.

Thanks and Regards,

Dr.Rajendra Rewatkar

Reply

----- Forwarded message -----
From: **Principal xtech** <principal@xaviertech.com>
Date: Thu, Apr 27, 2023 at 5:27 AM
Subject: Re: suggestion Regarding the syllabus of the M.Tech BME
To: Rajendra Rewatkar <rajendrar.feat@dmihir.edu.in>

Ok, I will check.

⋮

↶ Reply

↷ Forward

After this the expert had a telephonic conversation with the HOD and suggested the following changes.

1. List of experiments to be enhanced
2. Modify the curriculum according to the industry requirements.

CLINICAL ENGINEERING

a. **Subject-wise analysis of feedback:**

Specific Suggestions of various Stakeholders

Stakeholder	Suggestions
Students	<ul style="list-style-type: none">• Clinical Engineering evolution
Faculty	<ul style="list-style-type: none">• Healthcare environment
Professional/ Employer	<ul style="list-style-type: none">• List of Experiments need to be modified

Generic Revisions in Curriculum based on Stakeholders' Feedback

- Modify to syllabus as per industry need
- Change few experiments.

Recommendations of DCCB.O.S.BOS on stakeholders' feedback for Curriculum Revision

Areas of Curriculum Revision	Recommendations DCC & BOS	Percentage of Curriculum Revised
Course Content	The following suggested points must be incorporated in the curriculum revision: <ul style="list-style-type: none"> • Definition and scope of clinical engineering, • History of clinical engineering • Regulatory environment, • Medical device design and development 	6%
Outcome-based education	Identification of post Graduate attributes, Program Outcomes, Course Outcomes and mapping of CO-PO	1%
Scheme of Assessment	No changes in the assessment pattern	
TL Methodology	<ul style="list-style-type: none"> • More hands on sessions to be carried out 	1%
Total Curriculum Revision		8%

ACTION TAKEN REPORT

Stakeholder	Specific Observations from feedback	Action Taken			
		Topic (Addition/Modification)	Core Value	Domain	% Of Revision
Students	Clinical Engineering evolution	Definition and scope of clinical engineering	National, Regional	Cognitive/ Psychomotor/ /Affective	8 %
Faculty	Healthcare environment	Medical device design and development	National, Regional	Cognitive/ Psychomotor/ /Affective	
	Generic observations from feedback				
Student/ Alumina/ Faculty/ Professional/ Employer	Identified topics that were generic and obsolete and replaced with relevant topics	Knowledge representation, and machine learning			8%

MEDICAL INFORMATICS

b. Subject-wise analysis of feedback:

Specific Suggestions of various Stakeholders

Stakeholder	Suggestions
Students	<ul style="list-style-type: none">• Patient care systems
Faculty	<ul style="list-style-type: none">• Patient Monitoring Systems
Professional/ Employer	<ul style="list-style-type: none">• Case study to be included

Generic Revisions in Curriculum based on Stakeholders' Feedback

- Modify to syllabus as per industry need
- Change few experiments.

Recommendations of DCCB.O.S.BOS on stakeholders' feedback for Curriculum Revision

Areas of Curriculum Revision	Recommendations DCC & BOS	Percentage of Curriculum Revised
Course Content	The following suggested points must be incorporated in the curriculum revision: <ul style="list-style-type: none"> • Electronic Health Records (EHR) • Picture Archiving and Communication on System (PACS) 	1%
Outcome-based education	Identification of post Graduate attributes, Program Outcomes, Course Outcomes and mapping of CO-PO	1 %
Scheme of Assessment	No changes in the assessment pattern	
Total Curriculum Revision		2 %

ACTION TAKEN REPORT

Stakeholder	Specific Observations from feedback	Action Taken			
		Topic (Addition/Modification)	Core Value	Domain	% Of Revision
Students	Patient care systems	Electronic Health Records (EHR)	National, Regional	Cognitive/ Psychomotor/ /Affective	2%
Faculty	Patient Monitoring Systems	Picture Archiving and Communication on System (PACS)	National, Regional	Cognitive/ Psychomotor/ /Affective	
	Generic observations from feedback				
Student/ Alumina/ Faculty/ Professional/ Employer	Identified topics that were generic and obsolete and replaced with relevant topics	Knowledge representation, and machine learning			2%

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

c. **Subject-wise analysis of feedback:**

Specific Suggestions of various Stakeholders

Stakeholder	Suggestions
Students	<ul style="list-style-type: none">• Data science,• Data analytics,• Machine learning
Faculty	<ul style="list-style-type: none">• Artificial Intelligence.• AI in your company, AI and society.• Role of Data Science.•
Professional/ Employer	<ul style="list-style-type: none">• Case study to be included

Generic Revisions in Curriculum based on Stakeholders' Feedback

- Modify to syllabus as per industry need
- Change few experiments.

Recommendations of DCCB.O.S.BOS on stakeholders' feedback for Curriculum Revision

Areas of Curriculum Revision	Recommendations DCC & BOS	Percentage of Curriculum Revised
Course Content	<p>The following suggested points must be incorporated in the curriculum revision:</p> <ul style="list-style-type: none"> • Definition of AI and ML: Overview of AI and ML in biomedical engineering • Basic concepts and terminology, Differences between AI and ML • Types of Machine Learning Algorithms, Components of a Machine Learning System • Applications of AI and ML in Biomedical Engineering. 	3%
Outcome-based education	Identification of post Graduate attributes, Program Outcomes, Course Outcomes and mapping of CO-PO	1%
Scheme of Assessment	No changes in the assessment pattern	
TL Methodology	<ul style="list-style-type: none"> • Case studies to be included 	1%
Total Curriculum Revision		5%

ACTION TAKEN REPORT

Stakeholder	Specific Observations from feedback	Action Taken			
		Topic (Addition/Modification)	Core Value	Domain	% Of Revision
Students	Data science	Basic concepts and terminology	National, Regional	Cognitive/ Psychomotor/ /Affective	5%
Faculty	Artificial Intelligence	Applications of AI	National, Regional	Cognitive/ Psychomotor/ /Affective	
	Generic observations from feedback				
Student/ Alumina/ Faculty/ Professional/ Employer	Identified topics that were generic and obsolete and replaced with relevant topics	Knowledge representation, and machine learning			5%

ULTRASOUND APPLICATIONS IN BIOMEDICAL ENGINEERING

d. Subject-wise analysis of feedback:

Specific Suggestions of various Stakeholders

Stakeholder	Suggestions
Students	Sonography.
Faculty	Quantitative measurements such as tissue characterization
Professional/ Employer	<ul style="list-style-type: none">• Use case to be included

Generic Revisions in Curriculum based on Stakeholders' Feedback

- Modify to syllabus as per industry need
- Change few experiments.

Recommendations of DCCB.O.S.BOS on stakeholders' feedback for Curriculum Revision

Areas of Curriculum Revision	Recommendations DCC & BOS	Percentage of Curriculum Revised
Course Content	The following suggested points must be incorporated in the curriculum revision: <ul style="list-style-type: none"> • Data Acquisition Techniques • Pulse-echo imaging, • Doppler imaging, • Harmonic imaging Contrast imaging • Signal Processing Techniques • Digital signal processing. 	2%
Outcome-based education	Identification of post Graduate attributes, Program Outcomes, Course Outcomes and mapping of CO-PO	1%
Scheme of Assessment	No changes in the assessment pattern	
TL Methodology	<ul style="list-style-type: none"> • More hands on sessions to be carried out 	1%
Total Curriculum Revision		4%

ACTION TAKEN REPORT

Stakeholder	Specific Observations from feedback	Action Taken			
		Topic (Addition/Modification)	Core Value	Domain	% Of Revision
Students	Sonography	Data Acquisition Techniques	National, Regional	Cognitive/ Psychomotor/ /Affective	4%
Faculty	Quantitative measurements	Signal Processing Techniques	National, Regional	Cognitive/ Psychomotor/ /Affective	
	Generic observations from feedback				
Student/ Alumina/ Faculty/ Professional/ Employer	Identified topics that were generic and obsolete and replaced with relevant topics	Knowledge representation, and machine learning			4%



Registrar

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