



**Department of Mechanical Engineering**  
**Haldia Institute of Technology**  
[An Autonomous Institute under MAKAUT]

Minutes of the BOS meeting of the Department of Mechanical Engineering, Haldia Institute of Technology, Haldia held at 10:00 am in Room No 2003 on 06/11/2024 in the presence of the following Members.

<b>Prof. Dr. Subrata Mondal</b>	Principal, Haldia Institute of technology, Haldia.
<b>Prof. Dr. T. K. Jana</b>	Dean, School of Engineering, HIT, Haldia.
<b>Prof. Dr. G. K. Bose</b>	Professor & Head, ME Department, HIT, Haldia.
<b>Prof. Dr. S. Mitra</b>	Professor, Department of Production Engineering, JU, Kolkata.
<b>Prof. Dr. S. Bhaumik</b>	Professor, Deptt. of Aerospace Engineering & Applied Mechanics, IEST, Shibpur, Howrah.
<b>Prof. Dr. S. Ghosh</b>	Professor, Dept. of Mechanical Engineering, IEST, Shibpur, Howrah.
<b>Mr. Susobhan Patra</b>	GM, Haldia Energy Ltd.
<b>Dr. Venkata Naga Vamsi Munagala</b>	Assistant Professor, Mechanical Engineering Department, IIT Kharagpur.
<b>Dr. Siddharth Tamang</b>	Assistant Professor, Mechanical Engineering Department, IIT Kharagpur.
<b>Prof. Dr. Bikash Bepari</b>	Professor, ME Department, HIT, Haldia.
<b>Prof. Dr. Balaram Dey</b>	Professor, ME Department, HIT, Haldia.
<b>Dr. Nilabha Sankar Mitra</b>	Associate Professor, ME Department, HIT, Haldia.
<b>Dr. Supriyo Roy</b>	Associate Professor, ME Department, HIT, Haldia.
<b>Dr. Abhishek Samanta</b>	Associate Professor, ME Department, HIT, Haldia.
<b>Dr. Abhijit Saha</b>	Associate Professor, ME Department, HIT, Haldia.
<b>Dr. Bipradas Bairagi</b>	Assistant Professor, ME Department, HIT, Haldia.
<b>Dr. Premangshu Mukhopadhyay</b>	Assistant Professor, ME Department, HIT, Haldia.
<b>Dr. Ashoke Kr. Bera</b>	Assistant Professor, ME Department, HIT, Haldia.
<b>Sri Satyajit Chatterjee</b>	Assistant Professor, ME Department, HIT, Haldia.
<b>Sri Nirmalya Bayal</b>	Assistant Professor, ME Department, HIT, Haldia.
<b>Sri Sourav Sarkar</b>	Assistant Professor, ME Department, HIT, Haldia.
<b>Sri Souvik Gantait</b>	Assistant Professor, ME Department, HIT, Haldia.
<b>Sri Manas Kumar Bhukta</b>	Assistant Professor, ME Department, HIT, Haldia.
<b>Sri Pritam Pain</b>	Assistant Professor, ME Department, HIT, Haldia.
<b>Sri Sourav Pattanayak</b>	Assistant Professor, ME Department, HIT, Haldia.
<b>Sri Soumik Dutta</b>	Assistant Professor, ME Department, HIT, Haldia.

Following are the agenda and respective resolutions as shown hereunder.

**Agenda 1: Restructuring of the Curricula and syllabus of UG**

**Resolution 1.1: For the UG course a total credit of 165 has been well distributed among the broad categories of courses as per NBA guideline and NCrF as shown in the table hereunder.**

Category	Semester								Total
	1st	2nd	3rd	4th	5th	6th	7th	8th	
HM/HSMC	-	5	-	2	3	-	3	-	13
BS	11.5	9.5	3	-	-	-	-	-	24
ES	7	7	6	3	-	-	-	-	23
PC	-	-	14.5	15	17.5	18	3	-	68
PE	-	-	-	-	3	6	6	3	18
OE	-	-	-	-	-	-	-	5	5
PW	-	-	-	-	-	2	5	7	14
MC	-	-	0	0	-	-	-	-	0
<b>Credit</b>	<b>18.5</b>	<b>21.5</b>	<b>23.5</b>	<b>20</b>	<b>23.5</b>	<b>26</b>	<b>17</b>	<b>15</b>	<b>165</b>

HM/HSMC: Humanities and Social Sciences including Management Courses

BS: Basic Science Courses

ES: Engineering Science Courses

PC: Professional core courses

PE: Professional Elective courses

OE: Open Elective courses

PW: Project work etc.

MC: Mandatory courses

**Resolution 1.2: Owing to the abovementioned credit distribution the course structure has been made for all the semesters as shown hereunder.**

Note: The first year (1<sup>st</sup> and 2<sup>nd</sup> Semester) syllabus is under the purview of School of Applied Science and Humanities (SASH) department and common to all UG Engineering Programs.

**The curricula is formed in line with the National Credit Framework (NCrF) as proposed in NEP 2020**

**SEMESTER-I**

THEORY							
Sl No.	Course Code	Subject Name	Contact period per week			Total	Credit
			L	T	P		
1	BS-M 101	Mathematics-I	3	1	0	4	4
2	BS-PH 101	Physics	3	1	0	4	4
3	ES-EE 101	Basic Elec. & Electro. Engg.	3	1	0	4	4
4	BS-BT 101	Biology for Engineers	2	0	0	2	2
<b>TOTAL THEORY</b>						<b>14</b>	<b>14</b>
PRACTICAL							
5	BS-PH 191	Physics Lab	0	0	3	3	1.5
6	ES-EE 191	Basic Elec. & Electro. Engg. Lab	0	0	3	3	1.5
7	ES-ME 191	Workshop Practice	0	0	3	3	1.5
8	AU 101	NSS	0	0	0	0	0
<b>TOTAL PRACTICAL</b>						<b>9</b>	<b>4.5</b>
<b>TOTAL</b>						<b>23</b>	<b>18.5</b>

**SEMESTER-II**

THEORY							
SI No.	Course Code	Subject Name	Contact period per week			Total	Credit
			L	T	P		
1	BS-M 201	Mathematics-II	3	1	0	4	4
2	BS-CH 201	Chemistry	3	1	0	4	4
3	ES-CS 201	Programming for problem solving	3	1	0	4	4
4	HS-MC 201	Values, Ethics and Indian Knowledge System	2	0	0	2	2
5	HM-HU 201	English Language and Technical Communication	2	0	0	2	2
<b>TOTAL THEORY</b>						<b>16</b>	<b>16</b>
PRACTICAL							
6	BS-CH 291	Chemistry Lab	0	0	3	3	1.5
7	ES-CS 291	Programming for problem solving Lab	0	0	3	3	1.5
8	ES-ME292	Engineering Drawing	0	0	3	3	1.5
9	HM-HU 291	English Language and Technical Communication Lab	0	0	2	2	1
<b>TOTAL PRACTICAL</b>						<b>11</b>	<b>5.5</b>
<b>TOTAL</b>						<b>27</b>	<b>21.5</b>

**SEMESTER-III**

THEORY							
Sl. No.	Course Code	Subject Name	Contact period per week			Total	Credit
			L	T	P		
1	BS-M 301	Mathematics-III	3	0	0	3	3
2	ES-ME 301	Engineering Mechanics	3	0	0	3	3
5	ES-ME 302	Engineering Thermodynamics	3	0	0	3	3
3	PC-ME 301	Fluid Mechanics & Hydraulic Machines	3	1	0	4	4
4	PC-ME 302	Material Science	3	0	0	3	3
6	PC-ME 303	Metrology & Measurement	3	0	0	3	3
7	MC 301	Essence of Constitution of INDIA & Laws in Engineering Practices	2	0	0	2	0
<b>Total Theory</b>						<b>21</b>	<b>19</b>
PRACTICAL							
1	PC-ME 391	Fluid Mechanics & Hydraulic Machines Lab	0	0	3	3	1.5
2	PC-ME 392	Metrology & Measurement Lab	0	0	3	3	1.5
3	PC-ME 393	Machine Drawing	0	0	3	3	1.5
<b>Total Practical</b>						<b>09</b>	<b>4.5</b>
<b>Total of Semester</b>						<b>30</b>	<b>23.5</b>

**SEMESTER-IV**

THEORY							
Sl. No.	Course Code	Subject Name	Contact period per week			Total	Credit
			L	T	P		
1	HM-ME 401	Engineering Economics	2	0	0	2	2
2	ES-ME 401	Numerical Methods & Programming	2	0	0	2	2
3	PC-ME 401	Strength of Materials	3	0	0	3	3
4	PC-ME 402	Manufacturing Processes	3	0	0	3	3
5	PC-ME 403	Analysis & Synthesis of Mechanisms	3	0	0	3	3
6	PC-ME 404	Applied Thermodynamics	3	0	0	3	3
7	MC 401	Industrial safety	2	0	0	2	0
<b>Total Theory</b>						<b>18</b>	<b>16</b>
PRACTICAL							
1	ES-ME 491	Numerical Methods & Programming Lab	0	0	2	2	1
2	PC-ME 491	Strength of Materials Lab	0	0	3	3	1.5
3	PC-ME 492	Manufacturing Processes Lab	0	0	3	3	1.5
<b>Total Practical</b>						<b>8</b>	<b>4</b>
<b>Total of Semester</b>						<b>26</b>	<b>20</b>

**SEMESTER-V**

THEORY							
Sl. No.	Course Code	Subject Name	Contact period per week			Total	Credit
			L	T	P		
1	HM-ME501	Principles and Practices of Management	3	0	0	3	3
2	PC-ME 501	Machining Principles & Machine Tools	3	0	0	3	3
3	PC-ME 502	IC Engines & Gas Turbines	3	0	0	3	3
4	PC-ME 503	Heat Transfer	3	1	0	4	4
5	PC-ME 504	Design of Machine Elements	3	0	0	3	3
6	PE-ME 501	Professional Elective-I (Course category – 2, Design)	3	0	0	3	3
<b>Total Theory</b>						<b>19</b>	<b>19</b>
PRACTICAL/SESSIONAL							
1	PC-ME 591	Machine Tools Lab	0	0	3	3	1.5
2	PC-ME 592	Thermal Engineering Lab	0	0	3	3	1.5
3	PC-ME 593	Heat Transfer Lab	0	0	3	3	1.5
<b>Total Practical</b>						<b>9</b>	<b>4.5</b>
<b>Total of Semester</b>						<b>28</b>	<b>23.5</b>

**SEMESTER-VI**

THEORY							
Sl. No.	Course Code	Subject Name	Contact period per week			Total	Credit
			L	T	P		
1	PC-ME 601	Air-conditioning & Refrigeration	3	0	0	3	3
2	PC-ME 602	Modern Manufacturing Processes	3	0	0	3	3
3	PC-ME 603	Design of Mechanical Systems	3	0	0	3	3
4	PC-ME 604	Dynamics of Machines	3	0	0	3	3
5	PE-ME 601	Professional Elective-II (Course category – 1, Manufacturing, Production & Industrial)	3	0	0	3	3
6	PE-ME 602	Professional Elective-III (Course category – 3, Thermal)	3	0	0	3	3
<b>Total Theory</b>						<b>18</b>	<b>18</b>
PRACTICAL							
1	PC-ME 691	Air-conditioning & Refrigeration Lab	0	0	3	3	1.5
2	PC-ME 692	Modern Manufacturing Process Lab	0	0	3	3	1.5
3	PC-ME 693	Design Practice Lab	0	0	3	3	1.5
4	PC-ME 694	Dynamics of Machines Lab	0	0	3	3	1.5
5	PW-ME 681	Project- I *	0	0	4	4	2
<b>Total Practical</b>						<b>16</b>	<b>8</b>
<b>Total of Semester</b>						<b>34</b>	<b>26</b>

\* Project- I includes seminar on the project topic's introduction, literature survey, research gap finding, problem formulation and objectives.

**NOTE:** Vocational Training/Internship conducted up to sixth semester will be evaluated in seventh semester. Total accumulated hours of Vocational Training/Internship are 48 hours/week × 24 weeks = 1152 hours

**SEMESTER-VII**

THEORY							
Sl. No.	Course Code	Subject Name	Contact period per week			Total	Credit
			L	T	P		
1	PC-ME 701	Power Plant Engineering.	3	0	0	3	3
2	HM-ME 701	Production & Operations Management	3	0	0	3	3
3	PE-ME 701	Professional Elective-IV (Course category – 1, Manufacturing, Production & Industrial)	3	0	0	3	3
4	PE-ME 702	Professional Elective-V (Course category – 2, Design)	3	0	0	3	3
<b>Total Theory</b>						<b>12</b>	<b>12</b>
SESSIONAL							

1	PW-ME 781	Project – II **	0	0	6	6	3
2	PW-ME 782	Summer Internship / Vocational Training	0	0	0	0	2
<b>Total Practical</b>						<b>6</b>	<b>5</b>
<b>Total of Semester</b>						<b>18</b>	<b>17</b>

\*\* Project – II include Design of product, experiment, strategy, algorithm, hypothesis, service aid, gadgets and thorough analysis.

### SEMESTER-VIII

<b>THEORY</b>							
Sl. No.	Course Code	Subject Name	Contact period per week			Total	Credit
			L	T	P		
1	PE-ME 801	Professional Elective-VI(Course category – 3, Thermal)	3	0	0	3	3
2	OE-ME 801	Open Elective-I	2	0	0	2	2
3	OE-ME 802	Open Elective-II	3	0	0	3	3
<b>Total Theory</b>						<b>8</b>	<b>8</b>
<b>SESSIONAL</b>							
1	PW-ME 881	Project – III ***	0	0	10	10	5
2	PW-ME 882	Comprehensive Viva Voce	0	0	0	0	2
<b>Total Practical</b>						<b>10</b>	<b>7</b>
<b>Total of Semester</b>						<b>18</b>	<b>15</b>
<b>Total Credit</b>						<b>165</b>	

\*\*\* Project–III entails upshot of the project (keeping in view of utility, technical feasibility, economic viability, eco-friendliness) and also to divulge conclusion and future scope.

A multidisciplinary laboratory using AICTE IDEA lab, IoT lab, Computing lab etc. have to be conducted for a duration of 7.5 hours/week × 84 weeks (14 weeks/Semester × 6 Semester) = 630 hours.

### **List of Professional Electives**

Maximum two (02) professional electives can be selected from each course category

Course Code	
<b>Course Category – 1 (Manufacturing, Production &amp; Industrial Engineering)</b>	
A	Supply Chain Management
B	Total Quality Management
C	Material Handling Systems
D	Computer Integrated Manufacturing
E	Additive Manufacturing
F	Quantity Production Methods
G	Advanced Welding Technology
H	Surface Engineering & Laser Additive Manufacturing
I	Material Characterization
<b>Course Category –2 (Design Engineering)</b>	
J	Engineering Tribology
K	Finite Element Analysis
L	Mechanics of Composite Materials
M	Theory of Elasticity
N	Advanced Solid Mechanics
O	Non-Destructive Testing
P	Advanced Materials
Q	Mechanical Vibration
R	Fracture Mechanics
S	Bio-Mechanics

Course Category - 3 (Thermal Engineering)	
T	Computational Fluid Dynamics
U	Renewable Energy
V	Hydraulic and Pneumatic Control
W	Turbo-machinery
X	Two-phase Flow and Heat Transfer
Y	Automobile Engineering
Z	Advanced Fluid Mechanics

**List of Open Electives (Interdisciplinary and Multidisciplinary)**

Course Code	Course Name
A	Enterprise Resource Planning (ERP)
B	Marketing Management
C	Management Information System
D	System Engineering and Data Analytics
E	Operations Research
F	Mechatronics
H	Engineering Optimization
I	Industrial Robotics & Automation
J	Energy Storage
K	AI & Data Science
L	Project Planning and Cost Estimation
M	Microprocessor & Microcontroller
N	Fuel Cell Technology
O	Project Management
P	Electrical Vehicle Technology

The details of Total Notional Learning Hours excluding self-study Hours as furnished hereunder.

Semester	Credit point	Notional Learning Hours
1 <sup>st</sup>	18.5	23 × 14 = 322
2 <sup>nd</sup>	21.5	27 × 14 = 378
3 <sup>rd</sup>	23.5	30 × 14 = 420
4 <sup>th</sup>	20	26 × 14 = 364
5 <sup>th</sup>	23.5	28 × 14 = 392
6 <sup>th</sup>	26	34 × 14 = 476
7 <sup>th</sup>	17	18 × 14 = 252
8 <sup>th</sup>	15	18 × 14 = 252
NSS	0	10 × 14 = 140
Summer Internship / Vocational Training	2	48 × 24 = 1152
Multidisciplinary laboratory	0	7.5 × 84 = 630
Value added course (VAC)	0	40 × 3 = 120
<b>Total</b>	<b>165</b>	<b>4898</b> <b>(1224.5 hrs/yr)</b>

**Resolution 1.3: The credits of the different courses are ascertained through the guidelines laid down by NBA and NCrF are shown hereunder.**

Course Code	Course Titles	Teaching & Learning Scheme					
		Classroom Instructions (CI) (In hours per semester)		Lab Instructions (LI) (In hours per semester)	Term Work (TW) and Self Learning (SL) (TW+SL) (In hours per semester)	Total no. of Hours per semester	Total Credits (C) (Total Hours/30)
		L	T	P	SL		
BS-M 101	Mathematics-I	42	14	0	64	120	4
BS-PH 101	Physics	42	14	0	64	120	4
ES-EE 101	Basic Elec. & Electro. Engg.	42	14	0	64	120	4
BS-BT 101	Biology for Engineers	28	0	0	32	60	2
BS-PH 191	Physics Lab	0	0	42	3	45	1.5
ES-EE 191	Basic Elec. & Electro. Engg. Lab	0	0	42	3	45	1.5
ES-ME 191	Workshop Practice	0	0	42	3	45	1.5
AU 101	NSS	0	0	50	0	50	0
BS-M 201	Mathematics-II	42	14	0	64	120	4
BS-CH 201	Chemistry	42	14	0	64	120	4
ES-CS 201	Programming for problem solving	42	14	0	64	120	4
HS-MC 201	Values, Ethics and Indian Knowledge System	28	0	0	32	60	2
HM-HU 201	English Language and Technical Communication	28	0	0	32	60	2
BS-CH 291	Chemistry Lab	0	0	42	3	45	1.5
ES-CS 291	Programming for problem solving Lab	0	0	42	3	45	1.5
ES-ME292	Engineering Drawing	0	0	42	3	45	1.5
HM-HU 291	English Language and Technical Communication Lab	0	0	28	2	30	1
BS-M 301	Mathematics-III	42	0	0	48	90	3
ES-ME 301	Engineering Mechanics	42	0	0	48	90	3
ES-ME 302	Engineering Thermodynamics	42	0	0	48	90	3
PC-ME 301	Fluid Mechanics & Hydraulic Machines	42	14	0	64	120	4
PC-ME 302	Material Science	42	0	0	48	90	3
PC-ME 303	Metrology & Measurement	42	0	0	48	90	3
MC 301	Essence of Constitution of INDIA & Laws in Engineering Practices	28	0	0	22	50	0
PC-ME 391	Fluid Mechanics & Hydraulic Machines Lab	0	0	42	3	45	1.5
PC-ME 392	Metrology & Measurement Lab	0	0	42	3	45	1.5
PC-ME 393	Machine Drawing	0	0	42	3	45	1.5
HM-ME 401	Engineering Economics	28	0	0	32	60	2
ES-ME 401	Numerical Methods & Programming	28	0	0	32	60	2
PC-ME 401	Strength of Materials	42	0	0	48	90	3
PC-ME 402	Manufacturing Processes	42	0	0	48	90	3
PC-ME 403	Analysis & synthesis of Mechanisms	42	0	0	48	90	3
PC-ME 404	Applied Thermodynamics	42	0	0	48	90	3
MC 401	Industrial safety	28	0	0	22	50	0
ES-ME 491	Numerical Methods & Programming Lab	0	0	28	2	30	1
PC-ME 492	Strength of Materials Lab	0	0	42	3	45	1.5
PC-ME 493	Manufacturing Processes Lab	0	0	42	3	45	1.5
HM-ME 501	Principles and Practices of Management	42	0	0	48	90	3
PC-ME 501	Machining Principles & Machine Tools	42	0	0	48	90	3
PC-ME 502	IC Engines	42	0	0	48	90	3
PC-ME 503	Heat Transfer	42	14	0	64	120	4
PC-ME 504	Design of Machine Elements	42	0	0	48	90	3
PE-ME 501	Professional Elective-I (Course category – 2, Design)	42	0	0	48	90	3
PC-ME 591	Machine Tools Lab	0	0	42	3	45	1.5
PC-ME 592	Thermal Engineering Lab	0	0	42	3	45	1.5
PC-ME 593	Heat Transfer Lab	0	0	42	3	45	1.5
PC-ME 601	Air-conditioning & Refrigeration	42	0	0	48	90	3
PC-ME 602	Modern Manufacturing Processes	42	0	0	48	90	3
PC-ME 603	Design of Mechanical Systems	42	0	0	48	90	3
PC-ME 604	Dynamics of Machines	42	0	0	48	90	3
PE-ME 601	Professional Elective-II (Course category – 1, Manufacturing, Production & Industrial)	42	0	0	48	90	3
PE-ME 602	Professional Elective-III (Course category – 3, Thermal)	42	0	0	48	90	3
PC-ME 691	Air-conditioning & Refrigeration Lab	0	0	42	3	45	1.5
PC-ME 692	Modern Manufacturing Process Lab	0	0	42	3	45	1.5
PC-ME 693	Design Practice Lab	0	0	42	3	45	1.5
PC-ME 694	Dynamics of Machines Lab	0	0	42	3	45	1.5
PW-ME 681	Project- I*	0	0	35	25	60	2

PC-ME 701	Power Plant Engineering.	42	0	0	48	90	3
HM-ME 701	Production & Operations Management	42	0	0	48	90	3
PE-ME 701	Professional Elective-IV (Course category – 1, Manufacturing, Production & Industrial)	42	0	0	48	90	3
PE-ME 702	Professional Elective-V (Course category – 2, Design)	42	0	0	48	90	3
PW-ME 781	Project – II **	0	0	50	40	90	3
PW-ME 782	Summer Internship / Vocational Training	0	0	0	60	60	2
PE-ME 801	Professional Elective-VI(Course category – 3, Thermal)	42	0	0	48	90	3
OE-ME 801	Open Elective-I	28	0	0	32	60	2
OE-ME 802	Open Elective-II	42	0	0	48	90	3
PW-ME 881	Project – III ***	0	0	80	70	150	5
PW-ME 882	Comprehensive Viva Voce	0	0	0	60	60	2

**Agenda 2: Course Outcomes of the Courses**

**Resolution 2.1:** It has been decided by the house that during detailing that all the courses will have uniform number of COs (06) consistently and the CO statements are to be judiciously crafted and consequently CO-PO and CO-PSO articulation matrices are to be furnished.

**Agenda 3: Number of modules in each course**

**Resolution 3.1:** It has been decided that during detailing of the course, the maximum number of the Modules are to be stipulated to eight (8) depending on the volume of the content.

**Agenda 4: Strategies for Attainment of Program Outcomes namely PO 6 to PO 10**

**Resolution 4.1:** With regards to attainment of PO6 - PO10, it has been observed that attainment aspects of the Program Outcomes are already incorporated in the syllabus.

**Agenda 5: Type of value-added courses and strategies for improvement in employability.**

**Resolution 5.1:** the following value-added courses are offered by the department as furnished hereunder.

Name of the value-added courses (with 30 or more contact hours) offered	Course Code, if any	Duration of course (in hours)
AutoCAD for Mechanical Engineers (Industry partner: CADD Center)	VAC ME 191	40 Hrs
3D Printing with FDM (Industry partner: Ardent Computech. Pvt. Ltd.)	VAC ME 192	40 Hrs
Solid Works (Industry partner: Ardent Computech. Pvt. Ltd.)	VAC ME193	40 Hrs

**Resolution 5.2:** The following courses are offered with a direct bearing on Employability/ Entrepreneurship/ Skill development.

Name of the Course	Course Code	Activities/Content with a direct bearing on Employability/ Entrepreneurship/ Skill development
Air-conditioning & Refrigeration	PC-ME 601	The incumbent will be able to start his own career as service engineer/technician of air-conditioning/refrigerating equipments.
Modern Manufacturing Processes	PC-ME 602	The incumbent will be able to start his career as service engineer/technician for various nontraditional/advanced manufacturing equipments. He can work as a technical engineer while operating with these machines/equipments. He can make a start-up and act as an entrepreneur with the help of nontraditional machines by making various dies and moulds.
Computer Integrated Manufacturing	OE-ME 601A	The incumbent will be able to start his career as service engineer/technician for various nontraditional/advanced manufacturing equipments. He can work as a technical engineer while operating with these machines/equipments.
Mechatronics	OE-ME 601B	The incumbent will be able to start his career as service engineer/technician for various nontraditional/advanced manufacturing equipments. He can work as a technical engineer while operating with these machines/equipments.
Artificial Intelligence	OE-ME 601C	The incumbent will be able to work as an engineer under Industry-4.0 which encompass IOT, cloud computing, data science, embedded system etc.
Power Plant Engineering	PC-ME 701	The incumbent will be able to work as maintenance engineer at various sub-systems of the power



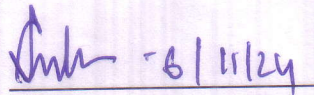
		plant. He can also be an operational engineer.
Automobile Engineering	PE-ME 701A	The incumbent will be able to work as maintenance engineer at various sub-systems of the automobile industries. He can also be an operational engineer or service engineer.
Alternative Fuels & Renewable Energy	PE-ME 701C	The incumbent will be able to work as maintenance engineer at various sub-systems of the power plant. He can also be an operational engineer.
Enterprise Resource Planning (ERP)	OE-ME 701A	The incumbent will have knowledge and exposure on overall operation and business administration of an enterprise.
Marketing Management	OE-ME 701B	The incumbent will be able to develop abilities and skills required for the performance of marketing functions
Internet of Things	OE-ME 701C	The incumbent will be able to work as maintenance/service engineer at various sub-systems of equipments related to cyber physical systems.
Additive Manufacturing	PE-ME 801A	The incumbent will be able to build-up his start-up from 3D modeling and printing technologies.
Quantity Production Methods	PE-ME 801B	The incumbent will be able to start his career as service engineer/technician for various nontraditional/advanced manufacturing equipments. He can work as a technical engineer while operating with these machines/equipments. He can make a start-up and act as an entrepreneur with the help of nontraditional machines by making various dies and moulds .
Supply Chain Management	PE-ME 802A	The incumbent will be able to understand and apply the current supply chain theories, practices and concepts utilizing case problems and problem-based learning situations.
Management Information System	PE-ME 802C	The incumbent will be able to understand the role of information technology and decision support systems in business. He will introduce the fundamental principles of computer-based information systems analysis and design and develop an understanding of the principles and techniques used. He will be able to acquire various knowledge representation methods and different expert system structures as strategic weapons to counter the threats to business and make business more competitive.

**Agenda 6: Community services by the students**

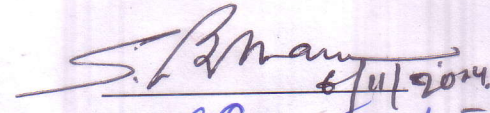
**Resolution 6.1: Department is regularly providing exposure to the High school students about state of the technologies like Additive Manufacturing, CNC machining, IoT etc.**

The meeting ended up with vote of thanks to the chair.

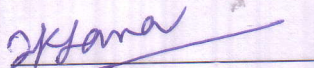
Prof. Dr. Subrata Mondal

 06/11/24

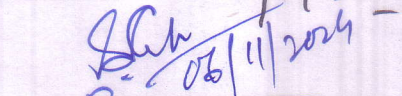
Prof. Dr. S. Bhaumik

 06/11/2024

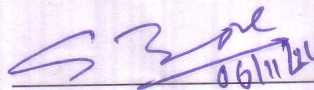
Prof. Dr. T. K. Jana



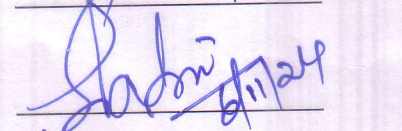
Prof. Dr. S. Ghosh

 06/11/2024

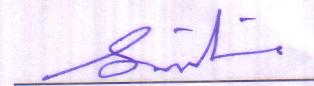
Prof. Dr. G. K. Bose

 06/11/24

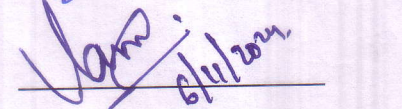
Mr. Susobhan Patra

 06/11/24

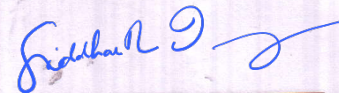
Prof. Dr. S. Mitra



Dr. Venkata Naga Vamsi Munagala

 06/11/2024

Dr. Siddharth Tamang







**Department of Mechanical Engineering**  
**Haldia Institute of Technology**  
[An Autonomous Institute under MAKAUT]  
**Attendance Record of BOS Meeting**  
**06/11/2024**

Name	Designation	Signature
Prof. Dr. Subrata Mondal	Principal, Haldia Institute of technology, Haldia.	 06.11.2024
Prof. Dr. T. K. Jana	Dean, School of Engineering, HIT, Haldia.	 06/11/2024
Prof. Dr. G. K. Bose	Professor & Head, ME Department, HIT, Haldia.	 06/11/2024
Prof. Dr. S. Mitra	Professor, Department of Production Engineering, JU, Kolkata.	
Prof. Dr. S. Bhaumik	Professor, Deptt. of Aerospace Engineering & Applied Mechanics, IEST, Shibpur, Howrah.	 6/11/2024
Prof. Dr. S. Ghosh	Professor, Dept. of Mechanical Engineering, IEST, Shibpur, Howrah.	 6/11/24
Mr. Susobhan Patra	GM, Haldia Energy Ltd.	
Dr. Venkata Naga Vamsi Munagala	Assistant Professor, Mechanical Engineering Department, IIT Kharagpur.	 6/11/2024
Dr. Siddharth Tamang	Assistant Professor, Mechanical Engineering Department, IIT Kharagpur.	
Prof. Dr. Bikash Bepari	Professor, ME Department, HIT, Haldia.	 06.11.24
Prof. Dr. Balaram Dey	Professor, ME Department, HIT, Haldia.	 06.11.24
Dr. Debasis Das Adhikary	Associate Professor, ME Department, HIT, Haldia.	 06/11/24
Dr. Nilabha Sankar Mitra	Associate Professor, ME Department, HIT, Haldia.	 06/11/2024
Dr. Supriyo Roy	Associate Professor, ME Department, HIT, Haldia.	 06/11/2024
Dr. Abhishek Samanta	Associate Professor, ME Department, HIT, Haldia.	 6/11/24
Dr. Abhijit Saha	Associate Professor, ME Department, HIT, Haldia.	 06/11/24
Dr. Bipradas Bairagi	Assistant Professor, ME Department, HIT, Haldia.	 06/11/2024
Dr. Premangshu Mukhopadhyay	Assistant Professor, ME Department, HIT, Haldia.	 06/11/2024
Dr. Ashoke Kr. Bera	Assistant Professor, ME Department, HIT, Haldia.	 6/11/24
Sri Satyajit	Assistant Professor, ME Department, HIT,	 06/11/24



Chatterjee	Haldia.	
Sri Nirmalya Bayal	Assistant Professor, ME Department, HIT, Haldia.	<i>Nirmalya Bayal</i> 06.11.24
Sri Sourav Sarkar	Assistant Professor, ME Department, HIT, Haldia.	<i>S. Sarkar</i> 06.11.24
Sri Souvik Gantait	Assistant Professor, ME Department, HIT, Haldia.	<i>Souvik Gantait</i> 06.11.24
Sri Manas Kumar Bhukta	Assistant Professor, ME Department, HIT, Haldia.	<i>Manas Kumar Bhukta</i> 06.11.24
Sri Pritam Pain	Assistant Professor, ME Department, HIT, Haldia.	<i>Pritam Pain</i> 06.11.24
Sri Sourav Pattanayak	Assistant Professor, ME Department, HIT, Haldia.	<i>S. Pattanayak</i> 06/11/2024
Sri Soumik Dutta	Assistant Professor, ME Department, HIT, Haldia.	<i>Soumik Dutta</i> 06/11/24