

The practical exposure in line with the current needs of the society is provided to the students by incorporating the new lab courses into the curriculum. The UG and PG courses have been developed to provide required inputs to aspiring entrepreneurs and provide extra support. The Innovation & Entrepreneurship Development Cell (IEDC) extends the need based programs by organizing workshops / filing patents. Apart from the basic courses Guest Lectures and Workshops are also conducted for the improvement of knowledge and skill expertise. Apart from the technical courses related to each of the specific programmes, few courses have social relevance satisfying the local needs and also some courses are also framed to integrate the national movements like START UP INDIA , UJWAL BHARAT etc and the details of courses are given below.

**Table 1 : Courses have relevance to the local, national, regional and global developmental needs**

Courses in Curriculum		Linkages with Societal Needs/ Government of India initiatives
CS408	Cloud Computing & Internet of Things	Smart India, Smart Cities
OECEC604 A	Big data Analytics	Digital India
PECCS 501G	Cyber Security	Digital India, National cyber security Policy
PCCCS 701	Cryptography and Network Security	Digital India, National cyber security Policy
	Electronics Engineering Workshop	Make in India
PCCCS 492	Computer Organization & Architecture Laboratory using VHDL	Digital India
PCCCS 394	IT Workshop	Skill India
	MEMS	Smart Cities Mission Programme
OECEC704 A	Internet of Things	Smart Cities Mission Programme
	Analog IC Design	Digital India
	Digital IC Design	Digital India
	Image Processing & Pattern Recognition	IMPacting Research INnovation and Technology (IMPRINT)-India
PECCS 502E	Soft Computing	IMPacting Research INnovation and Technology (IMPRINT)-India
	Wireless Communication	Smart Cities Mission Programme
	Renewable Energy Resources	Ujwal Bharat

MB107	Entrepreneurship	Start-up India
MCEC401	Environmental Science	National River Conservation Plan Environmental Sustainability, National Afforestation Programme
MOOCs(MBA)-22	Digital Marketing	Digital India
OEC- EE01B	Wavelet Transform	IMPacting Research INnovation and Technology (IMPRINT)-India
OEC 302(ME)	Production Operations Management & Entrepreneurship	Start-up India
ESC194	Engineering Drawing, 3D Design Lab	IMPacting Research INnovation and Technology (IMPRINT)-India
PEC-MEL 321 A1	Refrigeration & Air Conditioning	Local Needs (COLD STORAGE) Agricultural Mechanization ; KISAN VIKAS
BCAN-E302B	GUI Programming with .NET	Skill India

***Table2: Guest Lectures/Workshops have relevance to the local, national, regional and global developmental need***

<b>Name of the department</b>	<b>Name of the Capacity Development and Skill Enhancement programme</b>	<b>Year of implementation</b>	<b>Number of students enrolled</b>	<b>Name of the agencies/consultants involved with contact details, if any</b>
Computer Science and Engineering	Diversion 2022	2022	150	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	TDSM But First Coffee	2022	140	IEM-ACM
Computer Science and Engineering	Industry Talk by Google Engineer Mr. Eshan Chattaraj	2022	250	CSE, IEM Kolkata (Gurukul Campus)

Computer Science and Engineering	LinkedIn & Resume 101 by Attri Ghosal, SDE 1 @Swiggy	2022	200	GDSC IEM (Student Chapter)
Computer Science and Engineering	Career Guidance - Alumni Talk	2022	180	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	Distribution of mask and sanitizer by Department of Computer Science and Engineering from IEM Pavilion at Kolkata Book Fair 2022 on 09.03.2022.	2022	8	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	Code Till AC 2022 (Closed Coding Contest hosted on CodeChef)	2022	46	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	Lecture Series on Competitive Coding	2022	120	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	An "Industrial Talk" on "Deep into Python" by Dr. Pritam Bhattacharya (Technical Specialist for Continental Automotive)	2022	140	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	TDSM - Projects Discussion - Chooselyf	2022	100	CSE, IEM Kolkata (Gurukul Campus)

Computer Science and Engineering	TDSM But First Coffee - Episode 02 - Prathamesh Deshmukh	2022	120	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	TDSM But First Coffee - Episode 03 - Aditya Thakur	2022	130	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	TDSM But First Coffee - Episode 04 - Soham Biswas	2022	120	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	DIVERSION 2022 - Exclusive Podcast with Jeremy Ravenel - CEO, naas.ai	2022	130	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	Linux 101 : An Introduction to Linux at IEM Gurukul Campus by Debyeet Banerjee (Student, Cyber Security Lead, GDSC IEM)	2023	120	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	Alumni Talk by Diptesh Sil, Software Engineer, Google, on "Experience in Life"	2022	130	CSE, IEM Kolkata (Gurukul Campus)

Computer Science and Engineering	Alumni Talk by Ayon Chattopadhyay, Pursuing M.Tech, IIT Guwahati , on "Journey to IIT Guwahati	2023	120	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	IEMCO10 July Challenge, 2022	2022	10	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	An Alumni Talk on "Skills required as a professional" by Mr. Sohang Sengupta FRSA(Co-founder and Partner- Cibertix Technologies, Founder - ZeroDollarSecurity)	2022	87	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	Brahma Kumaris' Event-"Protect inner well being, Reduce Stress and Promote Happiness" on	2023	110	CSE, IEM Kolkata (Gurukul Campus)

Computer Science and Engineering	Alumni Talk by Mr. Sambit Halder on "Tips and Tricks to Succeed", Program Manager, Byjus', Organized by - Department of Computer Science and Engineering	2022	78	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	A Research Talk by Prof. Amit Konar, FNAE, FWAST, on "Brain-Computer Interface for Rehabilitative Robotics"	2023	156	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	Industry Talk	2023	79	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	6-Day Android Jetpack Compose Camp	2023	50	CSE, IEM Kolkata (Gurukul Campus)
Computer Science and Engineering	Project Brainstorming Session for Hacktoberfest 2022	2022	70	CSE, IEM Kolkata (Gurukul Campus)

Computer Science and Engineering	Alumni Talk by Mr. Attri Ghoshal on “Skills acquired in difference phase of life”, Software Engineer, Google	2023	79	CSE, IEM Kolkata (Gurukul Campus)
IT	Growth of AR and VR: How gaming tech is evolved to next level by Mr. Arijit Bhattacharya	2022	200	Department of IT , CSE (IOT CSBT) and CSE(IoT)
IT	Cracking CAT and Future	2022	200	Department of IT , CSE (IOT CSBT) and CSE(IoT)
IT	Impact of Data Science on Information Technology by Mr. Rahul Saha	2022	200	Department of IT , CSE (IOT CSBT) and CSE(IoT)

IT	Journey of A Kolkata based startup from college campus to funding in Shark Tank	2022	200	IEM Entrepreneurship Cell and Department of IT and CSE IoT CSBT
IT	ALUMNI TALK ON CAREER GUIDANCE by Spandan Ghosh	2022	200	IEM E-Cell, in association with the Dept. of IT and CSE (IOT CSBT)
IT	Career Guidance Podcast From Kolkata to Paris by Abhishek Goswami, alumni of IEM (2015 Batch)	2023	200	Department of IT and CSE (IOT CSBT)
IT	‘STREAM ANALYTICS’ delivered by Mr. Rahul Saha	2022	200	Department of IT , CSE (IOT CSBT) and CSE(IoT)



<a href="#">BCA &amp; M.Sc(CS)</a>	Machine learning for beginners, An introduction to neural network using python	2023	170	Department of BCA & M.Sc(CS) and Amitava Chowdhury, Department of Informatics, The University of Petroleum and Energy Studies, India
<a href="#">BCA &amp; M.Sc(CS)</a>	WORKSHOP DATA SCIENCE USING PYHON	2023	174	Department of BCA & M.Sc(CS) and Rajesh Sharma from Ardent Technologies.
<a href="#">BCA &amp; M.Sc(CS)</a>	Workshop on Internet Of Things (IOT) and Internet Security	2023	175	Department of BCA & M.Sc(CS) and Ardent Computech Pvt LTD
<a href="#">BCA &amp; M.Sc(CS)</a>	Workshop on Machine Learning with Python	2023	150	Department of BCA & M.Sc(CS) and Ardent Computech Pvt LTD

<a href="#"><u>BCA &amp; M.Sc(CS)</u></a>	Workshop on Blockchain Technology	2023	122	Department of BCA & M.Sc(CS) and Ardent Computech Pvt LTD
<a href="#"><u>BCA &amp; M.Sc(CS)</u></a>	Workshop on Machine Learning with Python	2023	122	Department of BCA & M.Sc(CS) and Ardent Computech Pvt LTD
<a href="#"><u>BCA &amp; M.Sc(CS)</u></a>	Workshop by Cyber Security Shaping A Safer Industry	2023	180	Department of BCA & M.Sc(CS) and Hrithik Lall, Chief Technical Officer, IEMA Research & Development Private Limited(IEM Labs)

<a href="#"><u>BCA &amp; M.Sc(CS)</u></a>	Workshop on IoT	2022	170	Department of BCA & M.Sc(CS) and Ardent Computech Pvt LTD
<a href="#"><u>BCA &amp; M.Sc(CS)</u></a>	Workshop on Machine Learning with Python	2022	174	Department of BCA & M.Sc(CS) and Ardent Computech Pvt LTD
<a href="#"><u>BCA &amp; M.Sc(CS)</u></a>	Workshop on Python	2022	175	Department of BCA & M.Sc(CS) and WebTek Lab Pvt LTD
<a href="#"><u>BCA &amp; M.Sc(CS)</u></a>	WORKSHOP ON ANGULAR JS/ REACT JS CLASS	2022	150	Department of BCA & M.Sc(CS) and WebTek Lab Pvt LTD

<a href="#">BCA &amp; M.Sc(CS)</a>	Workshop on Internet Of Things (IOT)	2022	170	Department of BCA & M.Sc(CS) and Ardent Computech Pvt LTD
<a href="#">BCA &amp; M.Sc(CS)</a>	Workshop on Internet Of Things (IOT) and Internet Security	2022	180	Department of BCA & M.Sc(CS) and Ardent Computech Pvt LTD
Electronics And Communication Engineering	A programmatic Approach to Antenna design and analysis	2022	100	WIE chapter along with IEM ECE Department
Electronics And Communication Engineering	High Frequency Communication: Recent Trends	2022	120	APS Chapter along with IEM ECE Department
Electronics And Communication Engineering	Recent Advancements in Microwave Absorbers	2022	150	APS Chapter along with IEM ECE Department
Electronics And Communication Engineering	Recent Trends on Low Power VLSI	2022	100	CAS Chapter along with IEM ECE Department

<a href="#">BCA &amp; M.Sc(CS)</a>	Webinar on Robotics and Advanced Technologies	2023	180	Speaker: Mohammad Farhan Ferdous
<a href="#">BCA &amp; M.Sc(CS)</a>	WORKSHOP DATA SCIENCE USING PYTHON	2023	180	Speaker: Rajesh Sharma from Ardent Technologies.
<a href="#">BCA &amp; M.Sc(CS)</a>	Technical Webinar on COVID-19 Emergence and Future Trajectory	2023	180	Speakers:  1.Dr Shally Awasthi, Professor, King George's Medical University, Pediatric Pulmonologist, Lucknow, India.  2.Dr Amitava Nandy,Virologist,Former Consultant (WHO),Kolkata,India.

				<p>3. Dr Shubhro Bhattacharya, Protocol Officer, Medical Officer, Department of Family &amp; Welfare, Government of West Bengal, Kolkata, India.</p> <p>4. Dr Kunal Sarkar, Senior vice chairman &amp; Senior consultant cardiac surgeon, MEDICA Superspeciality hospital, Kolkata, India.</p>
<a href="#">BCA &amp; M.Sc(CS)</a>	Tech Fest :: NIRVANA'21	2023	175	IEM BCA & M.Sc(CS) Department
<a href="#">BCA &amp; M.Sc(CS)</a>	FDP Cyber Intelligence and awareness on Social media Security	2023	180	IEM BCA & M.Sc(CS) Department
Electronics And Communication Engineering	Workshop for paper writing	2022	100	IEM, ECE Department

BCA & M.Sc(CS)	Workshop for Soft skill and communication	2023	185	IEM, BCA & M.Sc(CS)
BCA & M.Sc(CS)	Workshop for Startup Program	2023	180	IEM, BCA & M.Sc(CS)
Electronics And Communication Engineering	Exploit Your Mind to Your Benefits	2022	200	IEM ECE Department, Kolkata & Art of Living
IEM	International Yoga Day	2022	500	IEM
Electronics And Communication Engineering	Alternative way of Motherhood	2022	140	IEM ECE Department along with Kolkata Nivedita Shakti
Electrical and Electronics Engineering	iGEEK	2022	500	EEE with IEEE IEM Student Branch
Electrical and Electronics Engineering	2 Days Workshop on Machine & Deep Learning	2022	50	EEE with IET-IEM Student Chapter
Electrical and Electronics Engineering	Skill-strike 2022	2022	50	EEE with IET-IEM Student Chapter

Electrical and Electronics Engineering	Hackathon_DevSprint	2022	200	EEE with IEEE IEM Student Branch
Electrical and Electronics Engineering	Code of duty	2022	500	EEE with IEEE IEM Student Branch
Electrical Engineering	Distinguished Lecturer Series	2023	180	IET(UK)
Electrical Engineering	Distinguished Lecturer Series	2023	150	IET(UK)
Electrical Engineering	Distinguished Lecturer Series	2023	170	IET(UK)
Electrical Engineering	Distinguished Lecturer Series	2023	160	IET(UK)
Electrical Engineering	Competition	2023	120	IET(UK)
Electrical Engineering	Distinguished Lecturer Series	2023	140	Smart Society, USA
Electrical Engineering	Distinguished Lecturer Series	2023	150	Smart Society, USA
Electrical Engineering	Distinguished Lecturer Series	2023	140	IEI, India
Electrical Engineering	Competition	2023	110	IEI, India
Electrical Engineering	Competition	2023	115	IEI, India



Electrical Engineering	Competition	2023	130	IEI, India
Electrical Engineering	Competition	2022	300	Smart Society, USA
Electrical Engineering	Trimentoring	2022	43	IEI, India
Electrical Engineering	Distinguished Lecturer Series	2022	55	IET(UK) Kolkata Local Network
Electrical Engineering	Industry visit	2022	44	IET(UK) Kolkata Local Network
Electrical Engineering	Distinguished Lecturer Series	2022	140	IEI, India
Electrical Engineering	Distinguished Lecturer Series	2022	50	IET(UK) Kolkata Local Network
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2023	180	Life Skill by Sunando Banerjee
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2023	180	Speaker: Komal Parikh
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2023	175	Speaker: Ayush Paul
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2023	176	Speaker: Sanchari Chakraborty
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2023	180	Speaker: Rohan Dutta
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2023	179	Speaker: Bhuwan Agarwal

<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2023	180	Speaker: Spandan Das
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2023	182	Speaker: Wrichik Pal
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2023	178	Speaker: Abhishek Mishra
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2022	195	Riya Guhathakurta
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2022	195	Spandan Das
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2022	196	Ritu Bhalotia
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2022	196	Sourav Saha, Nielson
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2022	197	Souvik Kar
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2022	195	Tamal Baran Bhattacharya
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2022	192	Sujay Saha
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2022	192	Col. Sengupta
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2022	194	Hrittik Lal

<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2022	191	Sayantika Sen
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2022	199	Raja Mishra
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2022	196	Brotin Bhattacharya
<a href="#">BCA &amp; M.Sc(CS)</a>	Distinguished Lecturer Series	2022	192	Dr. Siddhartha Sankar
<a href="#">BCA &amp; M.Sc(CS)</a>	Self Defence Workshop	2023	170	Premjit Sen has founded Global Seishinkai Shito Ryu Karate Do Federation
<a href="#">BCA &amp; M.Sc(CS)</a>	Life Skill enhancement Program	2023	180	Chandra Shekhar Kundu
<a href="#">BCA &amp; M.Sc(CS)</a>	Life Skill enhancement Program	2023	175	Col.Prabir Sengupta
<a href="#">BCA &amp; M.Sc(CS)</a>	Art of Living	2023	180	Amrita RayChaudhury ,Maneesha Agarwala(Art of Living)

<a href="#">BCA &amp; M.Sc(CS)</a>	Life Skill enhancement Program	2023	180	Rahul Basak is a serial entrepreneur, Co-founder and CEO of "Amar Canvas ®", Co-founder and Chief Editor of "My Canvas Talk," Founder and Host of the international podcast "PEP Talks with Rahul".
<a href="#">BCA &amp; M.Sc(CS)</a>	Life Skill enhancement Program	2023	180	Sunando Banerjee
<a href="#">BCA &amp; M.Sc(CS)</a>	Life Skill enhancement Program	2023	180	Ms. Jayita Saha , Clinical Psychologist
<a href="#">BCA &amp; M.Sc(CS)</a>	Life Skill enhancement Program	2023	185	Dr Sidharth Shankar(Sidhu of Band Cactus)
BBA	Soft Skills	15th February 2022	456	Lead Strategic Development Pvt. Ltd, Mobile +91 90733 53033

BBA	Workshop on Data Analytics	18th February 2022	35	Institute of Engineering & Management, Kolkata, BBA Department
BBA	Communication Workshop on 'Understanding Communication through discourses of Performing Arts'	16th September, 2023	95	Prof. Sreejit Datta, Assistant Professor, Director of Centre for Civilizational Studies & Resident Mentor; sreejit.datta@gmail.com
BBA	Marketing Conclave	25th September, 2023	72	Institute of Engineering & Management, Kolkata, BBA Department

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