

Name of the programme	Name of Course	Duration of Course	Number of seats sanctioned	Eligibility Criteria
M.Tech.	Energy & Environment Engineering	2	18	B.E./ B.Tech. or equivalent degree in Mechanical/ Chemical/ Electrical / Electronics/ Civil/ Environmental/ Agricultural Engineering/ Biotechnology or M.Sc. Environmental Sciences or any allied subject of Life Sciences/ Physical Sciences/ Chemical Sciences/ Earth Sciences with at least 50% marks in aggregate (45% marks for SC/ST candidates of Haryana only). Result awaited (Qualifying Exam.) candidates can apply.

FORMAT or program-Specific Career Options to be uploaded on Council's Website:

1	Program of Study and its duration	M. Tech Energy & Environmental Engg. (Duration 2 years)
2	MOU's and Collaboration for this program	The program has been started in December 2020 only. Programs have recently been organized in association with ASSOCHAM and MOU's and Collaboration will be approached soon
3	Business Houses/ Companies which visits Campus for recruitment	<ul style="list-style-type: none"> • Energy and Environment Consultancies for Small and Micro Sector • International Development Agencies • Industry CSR Divisions & Foundations working for Energy Sector • Voluntary Organizations working in Energy and Environment Sectors at Grassroots
4	Details of Business Houses/ Companies offering in-industry projects/ training	<ul style="list-style-type: none"> • Ministries and Policy Wings of the Central & State Governments • Energy and Environment Consultancies for Small and Micro Sector • International Development Agencies • Industry CSR Divisions & Foundations working for Energy Sector • Voluntary Organizations working in Energy and Environment Sectors at Grassroots <p>Industries</p> <ul style="list-style-type: none"> • Gram Power, • Selco, • Reinenergy • Urjasamaadhan, • Batti ghar foundation • Mera Gao Power, • Onergy • Rural Spark, • Simpa Networks
5	Projects/ training offered by University	The Centre is planning to offer diploma course in Industrial health and Safety as well as Energy Auditing
6	Entrepreneurship Opportunities	Students completing degrees in the centre would be equipped with a set of technological, design and managerial skills which would enable them to make significant contributions to the Energy and Environment Sector. It is expected that some of the entrepreneurially minded ones would develop an innovation mindset and they would launch their own energy enterprises or join start-ups working on issues relevant to energy and environment. Students taking to the entrepreneurial route would not only

		have a challenging and creative career which they would experience, it would also ensure creation of employment and wealth at the grassroots level. Graduates of various programs would be eligible to apply for the position of Environmental Engineers at State and Central Government pollution control boards upon qualifying relevant examinations.
7	Opportunities in Education Sector	Yes
8	Opportunities as Social Worker	Yes, Work as an Energy Auditor, Environmental Auditor & Energy Manager
9	Opportunities in other Nations	Yes, as both the issues are Global in nature hence expertise is also globally applicable
10	Opportunities as an Academician	Yes, can work as an Energy Policy Planner and provide expertise on environmental issues of prime importance
11	Opportunities for Nation Development	Energy Auditor & Environmental Auditor Environmental Impact Assessment
12	Opportunities as Consultant	Yes, in both Energy as well as environment sectors
13	Opportunities for self-employment and How program leads to livelihood?	Under CES, research on various fields, such as Clean and Sustainable Technologies in the areas of biomass, combustion and utilization of fuels, solar energy, hydro, clean coal and also prime movers like new cycle using supercritical CO ₂ , energy storage, gas turbines, IC engines for alternative fuels, smart grids, etc. as well as smart grids shall also be taken up. Towards addressing efficient energy conversion, the centre will also focus on the technological aspects of climate change and mitigation options on other environmental issues associated with Energy.
14	Role/ Details of Specific Membership for the program (for eg. CII, AIMA, ISTE, IAA etc.)	<p>Ministries</p> <ul style="list-style-type: none"> - Ministry of Power (MoP) - Ministry of New and Renewable (MNRE) - Ministry of Environment, Forest and Climate Change (MoEF&CC) - Ministry of Housing and Urban Poverty Alleviation - Ministry of Human Resource Development - Ministry of Rural Development/ Ministry of Panchayati Raj - Ministry of Science and Technology <p>Autonomous institutions</p> <ul style="list-style-type: none"> - Central Electricity Authority of India (MoP) - Bureau of Energy Efficiency (MoP) - Central Electricity Regulatory Commission (MoP) - Solar Electricity Regulatory Commission (MoP) - Solar Energy Corporation of India (MNRE) - National Institute of Solar Energy (MNRE)

		<p>Research institutions</p> <ul style="list-style-type: none"> • PDPU, DHRE-IITR, CoEs in IITs, IISc, IITs, NITS, Jadavpur, TERI etc. <p>Energy/ power trading</p> <ul style="list-style-type: none"> • Indian Energy Exchange (IEX) • Power Exchange India Limited (PXIL) <p>Funding organizations</p> <ul style="list-style-type: none"> • National Solar Energy Federation of India (NSEFI) • Power Finance Corporation (PFC) • Indian Renewable Energy Development Agency (IREDA) • Banks • Smart Power India (Rockefeller Foundation) • Bill & Melindra Gates Foundation • CSRs
15	Aptness of the program with future challenges	The Energy sector is undergoing dramatic change. Energy is one of the principal issues facing the globe today, and consequently, the expansion of reasonable and competent energy sources is on the top. Although the National goals on energy and environment are reflected in various programs, the University as a cluster can move forward on the way to meet some of the goals. Through research and development, CES would like to contribute to the burning issues related to the energy scenario in the country. This program may also suggest solution for various burning Energy & Environmental problems
16	Can program contribute in rural development? How?	Yes, may help in solving the problem of rural energy needs and environmental issues
17	Industrial Visits related to the program made by students	Trainings have been arranged in Haryana State Pollution Control Board and IIT Delhi. Industrial visits shall be taken up shortly once the pandemic situation stabilizes.

HOD/ Chairperson Deptt. of _____

University Name J.C. Bose University of
Science & Technology