IIT Kharagpur to adopt Amazon Web Services Educate programme

The Indian Institute of Technology Kharagpur will adopt Amazon Web Services (AWS) Educate programme to help students gain cloud computing skills including hands-on experience in artificial intelligence (AI), a top official of the institute has said.

"We are happy to introduce AWS Educate programme to provide AWS Cloud Computing experience and AI-enablement for all our students, irrespective of their branch of study. We look forward to some really innovative solution ideas coming out of this," Director IIT KGP Prof P P Chakrabarti said Friday.

The AWS Educate programme is Amazon's global initiative to provide students and educators with resources needed to accelerate cloud-related learning and to help power the workforce of tomorrow.

The programme offers a robust set of no-cost tools, resources and AWS Promotional Credits for students and educators to boost their cloud skills and experience, an IIT KGP statement said.

"AWS Educate is designed to impart skill to students with the latest advancements in cloud computing technology and provide them with an environment to experiment on AWS Cloud, without making them worried about cost or access challenges," the statement quoted Amazon Internet Services Private Limited, president, Rahul Sharma as saying.

"We are pleased to work with IIT Kharagpur in their journey of higher learning, and to help them nurture new talent for a cloud-ready workforce," he was quoted in the statement.

As part of AWS Educate, the students will gain access to 12 Cloud Career Pathways covering topics that are in demand by employers, such as machine learning, cyber security, and software development, each with over 30 hours of content.

Upon completion, learners are eligible to receive an AWS Educate Certificate of Completion or an AWS Educate Badge.


Engineering Physics: Why should it be considered as a serious profession?

Human psychology always likes to know the unknown and this endeavour has catapulted the human enlightenment. The urge to discover have propelled the human race to travel enormously in space and
The quest for knowledge has led us to unravel the mysteries of wide-ranging issues, be it cosmic inflation or quantum computation or genetic mutation. All these achievements are mere fructification of intense research. However, the necessity in research and innovation have not diminished over time, rather it has got intensified.

In the 21st century, the quality and quantity of research is one of the key indicators of development. Recent UNESCO data shows that Israel sits at the top of the pile for the two most important indicators: highest research and development (R&D) expenditure as a percentage of GDP (about 4.5%) and researcher per million inhabitants (~8500). Therefore, it is of no surprise that the country is thriving inspite of being located in a politically and environmentally hostile region. The emerging economic powerhouse, China, is investing heavily in research by spending about 2.2% of its GDP. Only a robust research atmosphere can guarantee a sustainable development as well as political significance which is evident from the 20th-century history of Western Europe and the United States of America.

However, in the national context, the R&D expenditure is stagnant at about 0.7-0.8% for the last 20 years. In spite of being the country with the second largest population in the world, the scientific workforce is only about 500 researchers per million inhabitants! In a different perspective, we are even lagging significantly behind the eastern European nations and are only comparable to South Africa in the context of BRICS. Therefore, at the juncture of celebrating 75 years of India’s independence from the colonial rule, it is time to pull up our socks and indulge in research, if we really want to come out of the colonial shadow and aspire to be a global player in economics and politics. To initiate this process, in the recent years we have seen rolling out of several government schemes such as “Startup India”, “Digital India”, “Make in India”, “Skill India”. These initiatives are expected to encourage government institutions as well as the private sector to indulge in research and innovation.

The trends highlight that there is never a dearth of reward, challenge and excitement in being a research professional. A prominent example is the success story of ISRO, a government institution with a shoestring budget doing wonders in space research and emerging as a globally recognized and respected brand. Two big initiatives in fundamental science known as IndiGO (Indian Initiative in Gravitational-wave Observatory) and INO (India-based Neutrino Observatory) are in the pipeline. Not to mention the contributions of several CSIR labs and institutions like DRDO and BARC. Nevertheless, there is plenty of room to grow in research and one main contributor to the growth is the skilled workforce with adequate scientific temper. It must be noted that for this purpose the handful of IITs, NITs and IISERs are not sufficient and that prompted several private companies to invest heavily in scientific and technical education to bring home and nurture highest quality research and teaching ecosystem.

Albeit these efforts, there exists a gap between industry and academia. To be more precise, our curriculum still lags the vision for the endpoint linkup with real-life problems. One solution for this specific problem is to innovate in the curriculum in such a way that the scientific rigour shakes hand with technical advancements. It is well known that today’s scientific discovery is tomorrow’s engineering marvel. For this purpose, in the early 1980s, IIT-Bombay started an innovative course called Engineering Physics which was later taken up by some other prominent IITs. The foundation of the discipline was laid post world war II in the United States and subsequently in Europe and Canada. These came from the necessity of providing an engineering education with a strong foundation in physics and mathematics, as well as strong engineering capability. It is interesting to note that at the same time the transistor was discovered which actually paved the way for computer revolution. This allows one to realize how scientific discovery can lead to unveiling new industries. It is not the sole example in the pantheon of scientific discoveries rather a tip of the iceberg.

From the days of inception of Engineering Physics in India, the graduates from the program cater to an elite set of recruiters who look forward to an employee with a high level of mathematical abilities, logical thinking and good cognitive skills. Even then, many of the graduates prefer to join various institutions conducting R&D in India and abroad to experience the pure joy of shaping the future. The unique blending of Physics and Engineering allows the disciples to conquer many emerging new frontiers in science, engineering and technology.


---

**Free higher education to girls in Rajasthan-run colleges**

The Rajasthan government on Tuesday issued orders to provide free higher education for girls’ in government-run colleges.
The Congress government had made this promise in the election manifesto. Later higher education minister Bhanwar Singh Bhati also made it clear that college education for girls will be provided free of cost in government educational institutions from July this year. Apart from this, girl students will also be provided with sanitary napkins free of cost.

“Girls studying in government colleges will be provided free education from the current academic session which starts from July. Also, the female students in colleges will be given sanitary napkins free of cost,” the minister had announced earlier.

Steps will also be taken to augment the infrastructure facilities in state-run colleges, the new government had promised. Secretary higher education Vaibhav Galiya said the order was issued on Tuesday in fulfilment of the election manifesto which the government accepted as a government document.

In December last year, the Karnataka government also took a similar decision by announcing that it will bear the cost for the college education of all girls in the state who are pursuing pre-university, graduate and post-graduate courses in colleges run by it.

---

**IonEDUCATION Products:**

**IonIdea** (www.ionidea.com) has 70+ esteemed clients including universities, autonomous colleges, affiliated colleges in India and Malaysia for IonEducation Solutions! Thanks to all our mentors, domain partners, international advisers for helping our solutions to mature and meet the needs of higher education institutions. It has been a great journey for IonIdea since 2007 when autonomy began in Karnataka. Since then, we have added several innovative solutions to our portfolio in the areas such as Examination management ERP (with result processing addressing all the exceptions), Scanning & digitizing entire valuation process, Automation of end-to-end Outcome Based Education System (OBE SAR) to help accreditation process etc. In OBE & accreditation, our solution supports the process and SAR of all types of programs such as Engineering UG / PG (Tier I & II), Polytechnic, Pharmacy, MBA, MCA, Architecture etc.

For more details, please write an email to edu@ionidea.com

**IonCUDOS© (Outcome Based Education Software)**

Integrates Curriculum Design, Delivery Planning, Assessment Planning and Attainment of Course Outcomes (COs), Program Outcomes (POs) through direct and indirect measures. Helps in institutionalizing outcome-based education by reducing the faculty workload, effort and time significantly.

**IonEMS (Exam Management System)**

Automates entire Student Lifecycle activities from Admission to graduation producing versatile reports required for Universities, Autonomous Colleges, Higher Educational Institutions and other Governing Bodies.

**IonDVS© (Digital Valuation System)**

Fair, Transparent, Innovative, Robust Evaluation platform which automates the entire Evaluation of Answer scripts reducing the Cost, time involved in result processing and Provides versatile reports, real-time analysis of evaluator, Evaluation, and posts evaluation data for Post Examination Data Processing like Result processing, Grading and OBE in a secured Manner.
We take this pride opportunity to thank all our esteemed customers for their trust in us!

For more details on IonEDUCATION products and demo, please log in to [http://www.ion-education.com/](http://www.ion-education.com/)

Please visit our site for earlier newsletters: [http://www.ion-education.com/newsletter/](http://www.ion-education.com/newsletter/)

IonIdea
38-40, EPIP Zone, Whitefield, Bengaluru, Karnataka 560066
Office Phone: +91 (80)-665-81500 (extn. 1052, 1064)
Email: edu@ionidea.com | Website: [http://www.ion-education.com/](http://www.ion-education.com/)

STAY CONNECTED