

# ADVANCING SUSTAINABLE DEVELOPMENT IN INDIA WITH GIS

Development and data are highly interdependent, and both are necessary for mankind to make sustainable progress. GIS brings a whole new dimension to this duo, called precision. It is a ground-breaking technology that has made it possible for us to revisit and interpret data in different ways.

Amrita's initiative to inculcate GIS in its curriculum has led to a cooperative partnership with Esri India. This partnership will leverage GIS applications for various research initiatives at Amrita. A Center of Excellence in the area of "Geoinformatics and Spatial Analytics & Modelling" will be established at Amrita with dedicated Research, Development and Test facilities. The center will focus on capacity building for geospatial research in several domains. As a part of capacity building technical

webinars, workshops, hackathon, short certificate courses and GIS-based academic programs will be offered by the Centre in partnership with Esri India.

Amrita Centre for Wireless Networks and Applications offers a dedicated Mtech program in Geo Informatics and Earth Observation that aims to provide the students with an opportunity to acquire detailed systematic knowledge and critical understanding of spatial environment related processes. The program also introduces state of the art technologies for data collection and analysis, as well as the ability to independently develop innovative solutions to complex problems in the areas of natural and man-made environments.

There is growing evidence that GIS helps professionals from any field in making decisions with greater confidence and efficiency. GIS is also about great savings. With GIS, one not only saves on cost and effort, but also indispensable resources of time and energy. Amrita's strategic partnership with Esri India foresees the launch of well-trained and highly capable manpower who can work towards solving real world problems, thereby contributing to the United Nation's 2030 Agenda on Sustainable Development. Application of GIS technology in the curriculum will help Amrita deliver more impactful research outcomes.

GIS professionals have the edge of becoming leaders in any field. Whether adding value to a business or diversifying research or giving better direction to policy and decision makers, a GIS professional has it all.

### **Experiential Learning at Amrita: Breaking the classroom barriers**

Amrita has launched a new school- School for Sustainable Development to further its sustainable development research initiatives. Under this school, the Live-in-Labs® academic program, a fully funded E4LIFE International

Ph.D. Fellowship Program and several other Ph.D. and Minor programs are being offered that aim to develop SDG Champions. These programs utilize a multi-dimensional framework that facilitates the development and effective implementation of customized, scalable, and sustainable technological solutions to foster rural development. With over 150 projects in 21 states across India, Amrita Live-in-Labs® participants have touched the lives of approximately 60,000 rural residents during the past several years. With participation from over 40 institutions around the world and nearly 50 departments, schools, and centers at Amrita, students and faculty have clocked in a monumental 200,000+ hours in the field working towards sustainable development in rural communities.

### **About Amrita Vishwa Vidyapeetham:**

*Amrita is ranked as the no. 1 Private University in India by the Times Higher Education World University Rankings 2020 and is 4th best in the country. It has been recently awarded the Institution of Eminence status by the Government of India. Amrita holds two prestigious UNESCO Chairs, one on Experiential Learning for Sustainable Innovation and Development and the other on Women's Empowerment and Gender Equality.*

