

**Objective:**

Acquire a clear understanding of theory and application of Information & Community technology in various fields of rural development and bring out competent human resources for promoting the applications of ICT in Agriculture and Rural Development Learn skills to develop and operate rural area ICT applications or portals.

**Theory:****UNIT I Overview of ICT in Agriculture**

Introduction: ICT in Agricultural Development, Making ICT More Accessible and Affordable in Rural Areas, Mobile Devices and Their Impact, ICT-Enabled Agricultural Development

**UNIT II Enhancing Productivity on the Farm**

Increasing Crop, Livestock and Fishery Productivity through ICT, ICTs as Enablers of Agricultural Innovation Systems, Broadening Smallholders Access Financial Services, Farmer Organizations Work Better with ICT.

**UNIT III ICT in Rural Development**

Concept of ICT and its role in agriculture and rural development. ICT tools- print and electronic media, e-mail, Internet, use of multimedia, use of mobile phony, video and teleconferencing, computer-assisted instructions, touch screens, micro-computers, web technologies and information kiosks; ICT service in extension activity.

**UNIT IV Improving Public Service Provision**

Strengthening Rural Governance, Institutions, and Citizen Participation, ICT for Land Administration and Management Using ICT to Improve Agricultural Governance, Concept of Green Computing.

**Practicals:**

1. Learn Practical Skills to Develop and Operate Rural Area (Village) Portals (Websites), E-Health, E-Agriculture, E-Governance, E-Marketing, E-Weather etc.
2. Practical learning/hands-on-training from the experience of established rural e-connectivity centers.
3. Prepare Local Area Portal (LAP) Software / Website / Web Module for ICT services using latest technology.
4. Developing multimedia content and communication systems for farming community.

**Reference Books:**

1. Information & Communication Technology for Agriculture and Rural Development by R. Saravanan, C. Kathiresan, T. Indra Devi, New India Pub. Agency
2. Information and Communication Technologies by Rejendra Kumar, University Science Press.
3. Handbook of Research on Green ICT: Technology, Business, and Social Perspectives by Bhuvan Unhelkar, Publisher: IGI Global Snippet, 2010, ISBN: 1616928352.