

DISCIPLINE SPECIFIC ELECTIVE COURSE
DSE HH 7C4: INFORMATION AND COMMUNICATION TECHNOLOGIES
FOR DEVELOPMENT

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Information and Communication Technologies for Development DSE HH 7C4	4	2	0	2	Studied up to Semester VI	NIL

Learning Objectives

- To examine the role of Information and Communication Technologies (ICTs) in fostering economic, social, political, and environmental development
- To enhance awareness about ICT initiatives across various sectors
- To provide an understanding of the relationship between ICTs and Alternate Media
- To familiarize learners with the strategies for creating innovative and effective ICT-based tools and assess their efficacy

Learning Objectives

- Examine the relationship between ICTs and Development.
- Acquire knowledge about the effective usage of ICTs for social change and development.
- Address the national and global development concerns by using ICTs effectively.
- Understand the impact of ICT on different areas of development, such as poverty alleviation, education, healthcare, governance, and environmental sustainability.
- Know the convergence between ICTs and Alternate Media for development

SYLLABUS OF DSE HH 7C4

Theory (Credits 2; Hours 30)

Unit I: Introduction to ICTs

10 Hours

Unit Description: This unit elaborates upon the concept and evolution of ICTs. It highlights the issue of Digital divide and gender divide. It also explores upon learning theories and their implications for using ICTs. The unit also highlights development of ICTs and their role in global development.

- Understanding ICTs: Meaning, Definition
- Overview of ICTs: Internet, mobile technology, social media, digital platforms, etc.
- Evolution and Growth of ICTs: National and International platforms
- Second Communication Revolution, Digitalization, Cultural globalization and ICTs
- Classification of ICTs: Traditional and modern ICTs and their relevance to development
- Disparities and Divides: Digital Divide, Global and National Scenario, Gender and regional differences
- Perspectives and theories: Technology as Amplifier, Transfer and Diffusion of Technology
- Limitations and challenges of ICTs: Challenges and opportunities for ICT both in urban and rural areas.
- ICT related development Indices
- Government policies & Programs for use of ICT Development and Digital literacy
- Design Thinking & ICTs: Use of Principles of Design Thinking and Human Centered Design approach for developing ICT tools and strategies to use them

Unit II: ICT's in addressing national and Global Development Concerns

10 Hours

Unit Description: This unit focuses on various media such as radio, television, mobile applications and new media as tools for development. It highlights the role of ICTs as catalyst for development. The unit also covers the various initiatives of national and international level to address the global development challenges and the strategies to combat them.

- Radio, Television, New Media and Mobile as a tool for ICT
- Stakeholders in ICT projects, funding patterns and management
- Creating networks, partnerships and collaborations for use of ICTs
- Concept and characteristics of Networked Societies
- Role of ICTs in Livelihood development and Poverty Reduction, Governance, Education, sustainable agriculture; Environment protection & Climate change, Disaster Risk reduction and Empowerment of women
- National and international ICT policies for development
- Study, Analysis and design of ICT tools for development focusing on diversity and inclusion
- Cyber security and Data Privacy: Challenges and solutions in ensuring the security of digital platforms for development.
- National Cyber Crime Reporting Portal and Incident Reporting

Unit III: ICTs and Alternative Media**10 Hours**

Unit Description: This unit explains the concept of alternative media and its role in society. It also explores the interconnection of ICTs with alternative media. The unit analyzes the impact of ICTs on development and dissemination of alternative media.

- Concepts and characteristics of Community media
- Community media policy: Growth, National and international perspectives ICTs
- Traditional media as Community media
- Social networking sites and Multimedia platforms
- Participatory content creation and building engaging user experiences around ICTs
- Alternative print media- Characteristics, Strengths and Weakness
- Metaphors of Community Media- Alternative media, Citizens Media and People's media
- Digital Media for Development: Social media platforms, digital storytelling, community radio, podcasts, and their role in creating social change
- Artificial Intelligence and Development
- Computer mediated communication & development- Types, importance and Significance

PRACTICAL
(Credits 2; Hours 60)

- Analysis of successful ICT4D (Information and Communication Technologies for Development) projects/programmes in India and worldwide.
- Review of Mobile Apps on various Development Issues
- Analyzing and reviewing various internet-based platforms for social change such as Blogging, YouTube, Instagram, etc.
- Review of websites for e-initiatives of Govt. of India
- Research and development of a report/presentation related to Cyber security and Cyber Hygiene
- Conceptualization, ideation and creation of ICTs for a social media campaign

Essential Readings

- Heeks, R. (2018) . *Information and Communication Technology for Development (ICT4D)*. Routledge Publications, UK: ISBN-978-1138101814
- Mishra, RC. (2010). *Cyber Crime Impact in the New Millenium*, Auther Press
- Pannu, P., & Tomar, Y. A. (2010). *ICT4D Information Communication Technology for Development*. IK International Pvt Ltd.
- Tongia, R., Subrahmanian, E. & Arunachalam, V. (2005). *Information and Communications Technology for Sustainable Development*. Bangalore: Allied Publishers
- Unwin, T. (Ed.) (2009). *ICT4D: Information and Communication Technology for Development*. Cambridge: Cambridge University Press.

Suggested Readings

- Buckingham, D. (2008). *Youth, Identity, and Digital Media*. The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning. Cambridge, MA: The MIT Press.
- GoM. (2020). *Cyber Security Awareness Booklet for Citizens. Volume 1*. Office of Special Inspector General of Police Maharashtra Cyber, Home Department. Government of Maharashtra

<https://cybercrime.gov.in/pdf/Cyber%20Security%20Awareness%20Booklet%20for%20Citizens.pdf>

- Hassan, R. & Thomas, J. (2006). *The New Media Theory*. Open University Press.
- Kihrwadkar A, Pushpanadan, (2006), *Information and Communication Technology in Education*, Sarup and Sons, Delhi. Chapter- 1,2,3
- Kukkonen, H.O. & Kukkonen, H.O. (2015). *Humanizing the Web: Change and Social Innovation (Technology, Work and Globalization)*. New Delhi: Palgrave Macmillan.
- Marshall, P. D. (2004). *New Media Cultures, Information and Communication Technology for Development*. Hodder Stoughton Educational
- MoHA. (2021). *Cyber Hygiene for Cyber Space - Dos and Don'ts Basics*. Ministry of Home Affairs.
https://cybercrime.gov.in/pdf/Final_English_Manual_Basic.pdf
- Preston, P. (2001). *Reshaping Communication: Technology, Information and Social Change*. London, California, New Delhi: Sage Publications. DOI: <http://dx.doi.org/10.4135/9781446222164>
- Vanaja, M. & Rajasekar, S. (2016). *Information & Communication Technology (ICT) In Education*. New Delhi: Neelkamal Publications.
- Warschauer, M. (2004). *Technology and Social Inclusion: Rethinking the Digital Divide*. MIT Press (MA).
- Weigel, G. & Waldburger, D. (Eds.) (2004). *ICT4D – Connecting People For A Better World. Lessons, Innovations and Perspectives of Information and Communication Technologies in Development*. Berne: Swiss Agency for Development and Cooperation (SDC) and the Global Knowledge Partnership (GKP)

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time