SE TU

Ollscoil
Teicneolaíochta
an Oirdheiscirt

South East
Technological
University

Module Descriptor

Information Systems and International Development

(Computing and Mathematics)

Information Systems and International Development (A14102)

Short Title: IS & International Development
Department: Computing and Mathematics
Credits: 10   **Level:**   Postgraduate

Description of Module / Aims

International development agencies and NGOs are growing sectors with a traditionally low levels of IS knowledge, but in which demand for IS knowledge is increasing. This has created new career opportunities for IS professionals in agencies such as the United Nations, World Bank, NGOs and international banks asd well as in broader sectors dealing with mirgation, poverty, disaster response and recovery etc.. Information systems play a key role through the creation, for example, of effective, IT-enabled, inter-organisational networks and supply chains which reduce transaction costs, speed up response to trends and events, create productive and efficient access pathways to IT-mediated global marketplaces. Also, international agencies are implementing digitally-enabled systems to support rapid response and agency coordination in disaster recovery, conflict and other emergency situations. On the policy side, rich data is needed to understand development contexts and inform and evaluate policy and other interventions. This module explores how information systems, computer technologies, data analytics and knowledge-based systems play an important role in international and local development of marginalised communities and in responses to poverty, conflict, disaster and other development work.

Programmes

	stage/semester/status
COMP-0289 MSc in Computing (Information Systems Processes) (WD_KISYP_R)	1 / 0 / E

Indicative Content

- Introduction to major concepts
- Development Studies: What do we mean by development? Local and global development issues, the role of information systems. gathering data and measuring development; information, calculations and important metrics
- Poverty and Inequality: Definitions and implications of poverty of inequality; poverty cycles and traps; the role of digital systems; data, metrics and models of poverty and inequality
- Conflict and emergency: Humanitarian interventions; Peacekeeping and post conflict development; the role of IT; cost-oriented solutions; ordinance and related issues; data and metrics
- Merging development and security: the role of information systems in international security; digital technologies and security risk; Fragile states; Security and Under-Development, Systemic Fragility and the Conflict Trap; data, models and metrics
- Globalisation & globalised IT networks, internetworking and system effects of connectivity
- Reforming international agencies and the role of digital systems
- Case studies of information systems and international development

Learning Outcomes

On successful completion of this module, a student will be able to:

1. Appraise the complex nature of international development engagements and important dimensions of that engagement for systems professionals.
2. Assemble important sources of development data and justify their role in key metrics, and how these are formulated and by whom.
3. Evaluate the role of information technologies and processes in developing contexts.
4. Appraise important information and knowledge models associated with international development.
5. Appraise important theories, systems and structures of the international development context.

Learning and Teaching Methods

- The course will adopt a combination of a didactic approach and workshop materials and case studies.
- Students will be presented with a series of concepts and then use case studies and group-based workshop activities to explore these issues in real-life contexts.
- The course will also include debating of issues in relation to the role of information systems and digital technologies in the work of international agencies, NGOs and other actors.

Learning Modes

Learning Type	F/T Hours	P/T Hours
Lecture	36	36
Workshop	12	12
Independent Learning	222	222

Assessment Methods

	Weighting	Outcomes Assessed
Continuous Assessment	50%	
Portfolio	50%	1,2,3,4
Final Written Examination	50%	1,2,3,4,5

Assessment Criteria

<40%: Inability to demonstrate a rudimentary understanding of basic concepts associated with information systems in a development context or a rudimentary assessment of approaches, metrics, models and other aspect of the course materials. Inability to demonstrate the capacity to personally reflect on their learning and its implications for them as systems professionals or in a similar sphere.

40%–59%: Demonstrate some understanding of information systems in international development and related contexts. Understand and reflect upon the basic characteristics of the various theories and ideas presented in the course, and be able to practically apply these. Some reflective learning evident but may lack satisfactory critical ability.

60%–69%: The above to a very good level of competence. In addition, showing an ability to apply the approaches to complex problems and demonstrate a critical appreciation of the complex nature of international development. Be able to critically reflect on own learning experience to a relatively advanced level.

70%–100%: All the above to excellent level. Be able to critically assess the strengths and limitations of a particular technology and methods associated with IS in relation to development. Be able to assess trends in the field of information systems and international development. Demonstrate a deep level of reflection on the theories and ideas presented in this module and ability to weigh up vaiorus approaches to an advanced level.

Supplementary Material(s)

- Baskaran, A. and M. Muchie. *Bridging the Digital Divide: Innovation Systems for ICT in Brazil, China, India, Thailand, and Southern Africa.* UK: Adonis & Abbey Publishers, 2007.
- Desai, V. and R. Potter. *Companion to Development Studies.* 3rd ed.. New York: Routledge, 2014.
- Lennie, J. and J. Tacchi. *Evaluating Communication for Development.* 1st ed.. New York: Routledge, 2013.
- Schaaf, R. *Development Organisations.* New York: Routledge, 2013.
- van Dijk, J. *The Deepening Divide: Inequality in the Information Society.* Thousand Oaks: Sage, 2005.

Requested Resources

- Room Type: Computer Lab