Course Title	Technology for Development		Course Code		BST 11062		
Year	1	Semester	1	Credits	02	Theory (hr)	20
						Practical (hr)	20
						Independent Learning (hr)	04

Aim of the Course:

To provide the background information pertaining to historical development, recent advancements, contemporary issues and future directions in technological development

Intended Learning Outcomes:

After completion of this course, the learner should be able to:
- Explain the key historical events took place in the process of technological development.
- Explain the recent advancements and contemporary issues related to technological development.
- Assess the appropriateness of a given technology for development.

Course Capsule:

Theory
What is technology - How does technology evolve over time. Role of technology in development process; Historical process of technological development - Ancient engineering practices, invention of wheel, structures in ancient Greece and Egypt, Roman road network, Sri Lankan "stupas" and extensive irrigation network; Industrial revolution and influence of energy: invention of the steam engine, cotton spinning and advancement in Iron making. Invention of internal combustion engine and electrical power generator; Recent developments in technology - the effect of wars: first and second world wars. Invention of synthetic rubber, radar, nuclear power and synthetic fuel; The space age: rapid advancement in rocketry, material science, electronics and computers, including light-weight materials, satellite radio and television, cell phone technology, GPS navigation system, solar energy; Contemporary issues in technology development- Influence of computer: automated control systems, rapid advancement in complex engineering designs, virtual prototype testing; The future scenario- artificial intelligence, renewable energy and inventions to appreciate sustainable development with innovations for the existence of mankind; Socio economic and political implications of the new technologies

Practical
Role of Technology for Development – Conceptualization Group Work; Industrial revolution and influence of energy – Mind Mapping & Poster Preparation; Renewable energy and inventions to appreciate sustainable development with new innovations - Tutorials & Development of the Case; Technology issues in agriculture and other sectors: Analysis – Tutorials & Development of the Case

Assessment:

Continuous assessment: 30%
End semester assessment: 70%