


Quick Guide to MSc Projects
@
School of Computing and Informatics

Starting your Project

- Read, understand and be guided by SCI **MSc Project Guidelines**
- Understand the **Roles** of the following:
Student, Supervisor, Coordinator, Panel
- Understand Supervisor **Allocation Process**
- Understand **Assessment Process** and **Criteria**
- Understand and align your project to SCI **Thematic Areas**
- Use MSc Projects Portal
<http://scimsc.uonbi.ac.ke/>

CCA599

Programme Objective No. 3: Enable learners to effectively link research, innovation, entrepreneurship and practical application

 The project will be undertaken in line with the School's project guidelines. The project will be undertaken in the areas of: ICT in Education, Health Informatics, Applied Bio-informatics, Agri-Informatics, ICT in Financial Services, e-Governance, ICT in Environmental Management. The project research topic will be chosen in consultation with supervisors and will be approved by the School's Board of Examiners.

CCI599

Programme Objective No. 5: Produce high quality research and products that can compete effectively at the global level

- The project will be undertaken in line with the School's project guidelines. The project will be undertaken from any of the following areas of specialization: Embedded Intelligent Systems, Multi-agent Systems, Analytics and Business Intelligence, Language Technology, Image and Vision Systems. The project research topic will be chosen in consultation with supervisors and will be approved by the School of Computing and Informatics Board.

CDT599


Programme Objective No.2: Produce researchers in the area of distributed computing technology who can explore and innovate new techniques for solving real world problems

- The project will be undertaken in line with the School's Project guidelines. The project will be undertaken from any of the following areas of specialization namely: requirements analysis, specification, design and implementation of distributed System; performance, reliability and other analysis of distributed system. The project topic will be chosen in consultation with the supervisors and will be approved by the School of Computing and Informatics Board

CIT 599

Programme Objective No. 2: Provide learners with skills necessary to implement ICT based solutions in organizations

Programme Objective No. 3: Equip learners with skills necessary to manage the ICT function in organizations

 The project will be undertaken in line with the School's project guidelines. The project will involve: IT outsourcing, cloud computing, electronic commerce, management of ICT projects, ICT management, ICT security, ICT policies, e-government, etc. The project will focus on impact, evaluation, adoption, implementation, design frameworks etc. The project topic will be chosen in consultation with supervisors and will be approved by the School's Board of Examiners

Key UoN Policy Documents

- Research Policy
- Intellectual Property (IP) Policy
- Plagiarism Policy
- Open Access Policy
- NACOSTI Guidelines on Research Licensing and Institutional Affiliation

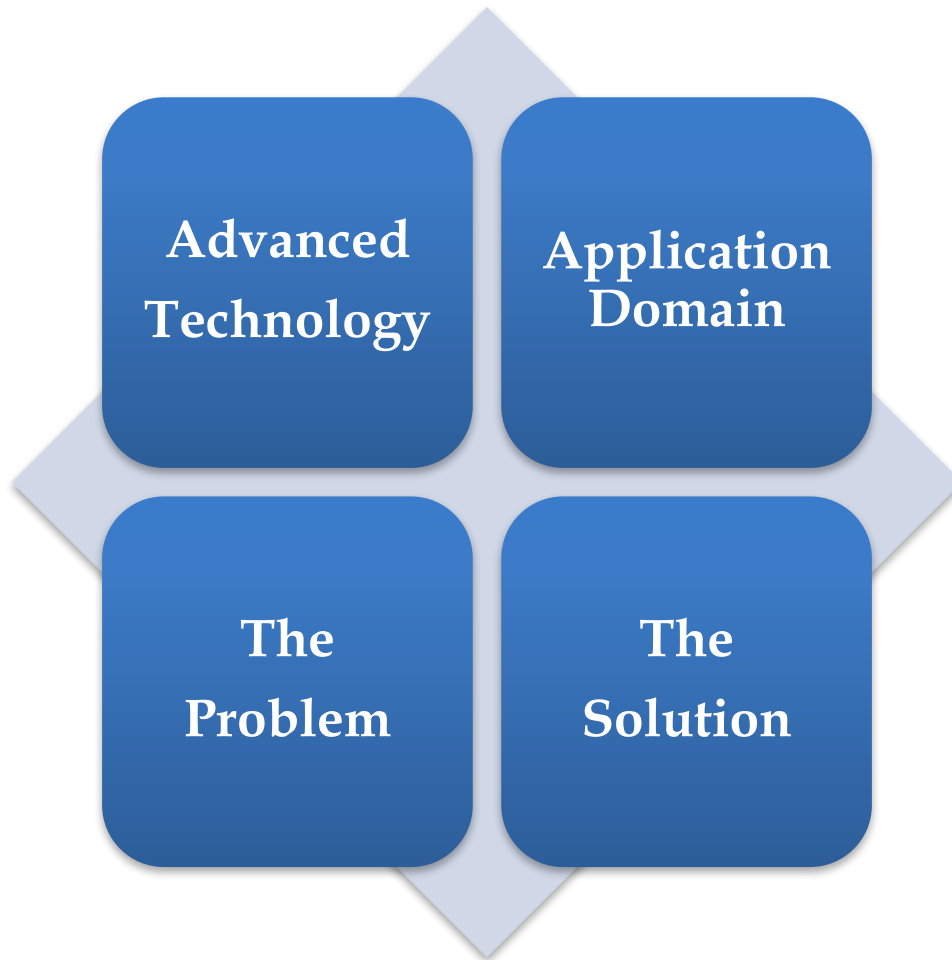
Key National Policy Documents

- National ICT Policy 2019
- Digital Economy Blueprint 2019
- Digital Economy Strategy 2020
- ICT Masterplan 2017
- Blockchain Taskforce Report 2019
- Vision 2030
- The Big Four Agenda
- Medium Term Plans (MTP)
- Sector Specific Policies

Key Resources

- University e-Repository
 - Over 40,000 dissertations
 - Over 28,000 journal articles
 - *For sample proposals ..read the first three chapters of any good dissertation*
- Google Scholar
- Research Gate
- IST Africa

Key Components of the Project



- *Using the advanced technology in the identified application domain, what **problem** are you solving?*
- *In addressing the identified problem in the application domain through the use of the advanced technology, what will be the **outcome**?*
- *What is the most innovative **solution** to the identified problem in the application domain?*

Thematic Areas – **Smart Africa Alliance**

- High Tech Parks
- Digital Economy
- Smart Cities
- Smart Villages
- Smart Communities
- Innovation
- Big Data
- Cyber Security
- Data Centres
- Job Creation
- Digital Literacy
- Green Economy
- Content
- Virtual Reality
- Internet of Things
- Digital Libraries
- Youth Talent
- Smart Tax
- e-Agriculture
- e-Health
- e-Education
- e-Tourism
- e-Immigration
- e-Customs

Thematic Areas – Government Policies

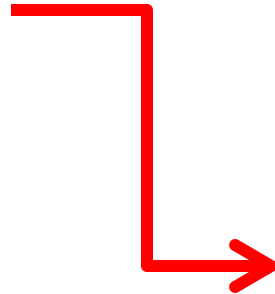
- Digital Economy
- Digital Government
- Digital Business
- Infrastructure
- Innovation
- Entrepreneurship
- Digital Skills
- Digital Values
- Digital Inclusion
- Integrated Ecosystem
- Data
- Emerging Trends
- Green ICT
- Security
- Policy Framework
- Regulatory Framework

Thematic Areas – **IST Africa**

- E-Health
- E-Government
- E-Agriculture
- Technology Enhanced Learning
- E-Infrastructures
- Digital libraries
- Internet of Things
- ICT for Environmental Sustainability
- Living Labs
- Mobile Applications
- Next Generation Computing
- Big Data
- Cloud Computing
- Data Localization
- Visualization
- Innovation
- Societal Implications of Technology

Deliverables

- It must be clear what the final project deliverable
- Sample.....



- **Publishable Paper**

Algorithm	Innovation
Analysis	Model
Application	Prediction
Architecture	Roadmaps
Assessment	Strategy
Business Solution	System
Case	Technique
Design	Theory
Empirical Survey	Tool
Experience	
Forecast	
Framework	

Key Evaluation Criteria

- Problem statement and purpose of the project
- Research outcomes and their significance to key audiences
- Research objectives
- Research questions/hypotheses
- Literature review - adequate, up-to-date, relevant
- Located within body of knowledge/viable framework
- Link between research framework and the problem
- Research design and its justification
- Sources and relevance of data
- Tools, procedures and methods for data collection, analysis and presentation of results

Common Wrong Approaches₁

Blind Supervision

I would like you to supervise me..

Graduation

I want to graduate this year..

When is the next graduation..

Living in the Past

I started my project in year..

When I started my project..

My classmates have graduated..

You remember last time...

My supervisor was..

Title of my project was..

Common Wrong Approaches₂

Appointment

Don't bother to make appointment..

Aimlessly waiting at School reception..

Irritating phone calls..

Greener Pastures

I want to apply for promotion..

My employer is posting me abroad..

I want to be a lecturer..

I have gotten Green Card..

Blind Ambition

I want to do PhD..

Common Wrong Approaches₃

Living Elsewhere

In my former University..

In xyz University..

Bad Assumptions

I heard..

I thought..

My understanding was..

Unhelpful Suggestions

Why don't you..

Why are you..

Why do you people..

Common Mistakes to Avoid₁

in documentation

- Spelling mistakes
- Grammatical errors
- Ambiguous statements
- Long and meaningless project titles
- Objectives not articulate
- Poorly structured documents
- Inadequate background
- Lack of focus
- No understanding use of Qualitative and Quantitative methods of data analysis
- No technical contribution
- Result not portraying any fact about analyzed data

Common Mistakes to Avoid₂

- Making unsubstantiated claims
- Incomplete, poorly formatted References
- Filling References with blogs, textbooks, newspapers, lecture notes
- Assume what you are doing is newest thing in the world
- Misrepresenting other scholarly works
- Lack of attractiveness to potential readers