### APPROVED

# Certificate in Foundations of Cloud Computing Informatics and Creative Arts

Programme Short Title	Certificate in Foundations of Cloud Computing							
Programme Code	DK_ICFCC_8	Mode of Delivery	Full Time On Campus, Par On Campus, Modular, Full Blended		No. of Semesters		2	
Semesters Per Stage	2	NFQ Level	8	Progra	amme Credits 30			
Language of Instruction	English							
Field of Study	0613 - Computer Science							
Educational Aim of Programme	The overall aim of this course is to produce Computing graduates with a specialisation in different aspects of Data Centre Operations.							
External Code	Code:							

## Programme Learning Outcomes (PLOs) On successful completion of this programme the learner should be able to :

#	Description
PLO1	The learner will have knowledge and understanding of advanced concepts in the following areas: • Computer Systems • Software Engineering • Computing Techniques • Computer Networks • Cloud Architecture • Social and Professional Issues
PLO2	explain concepts and theories of one or more specialist computing area, including state-of-the-art technology;
PLO3	describe the limitations of some current computing theories and knowledge;
PLO4	explain how academic and industrial research leads to new computing knowledge and technologies.
PLO5	model and design complex computer-based systems in a way that demonstrates comprehension of the trade-off involved in design choices;
PLO6	deploy appropriate theory, practices and tools for the specification, design, implementation and evaluation of computer-based systems;
PLO7	apply quality concepts to computing products and processes;
PLO8	analyse the extent to which a computer-based system meets the criteria demanded for its current use and future development;
PLO9	conduct research in topics in computing under close supervision and guidance;
PLO10	locate and evaluate information through online research.
PLO11	evaluate computer based systems in terms of general quality attributions and possible trade-offs presented within the given problem;
PLO12	specify, design and implement computer-based systems;
PLO13	manage a computer-based project throughout all stages of the lifecycle;
PLO14	identify and analyse criteria and specifications appropriate to specific problems with a focus on security and plan strategies for their solution;
PLO15	identify and select appropriate strategies to solve system problems;
PLO16	develop innovative solutions to real-life situations.
PLO17	select and implement measures to address identified risks or safety aspects relevant to computing systems within a given context;
PLO18	apply best practice in a range of real-world contexts;
PLO19	adopt appropriate professional, ethical and legal practices in the exploitation of computer technology;
PLO20	act effectively and choose an appropriate response from a range of possibilities;
PLO21	transfer and apply creative and diagnostic skills in a range of contexts;
PLO22	assess the impact of new technologies in a given environment.
PLO23	work effectively as an autonomous individual;
PLO24	manage issues involved in leading complex groups;
PLO25	work as a member of a development team, recognising the different roles within a team and different ways of organising teams;
PLO26	interact effectively with staff at all levels of an organisation;
PLO27	work in an international context;
PLO28	design and manage small group projects;

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PLO29	constructively criticise the work of others.	
PLO30	select and apply appropriate research skills;	
PLO31	evaluate own strengths and weaknesses;	
PLO32	identify limitations of own knowledge;	
PLO33	constructively criticise own work;	
PLO34	4 manage one's own learning and development, including time management and organisational skills;	
PLO35	apply quality concepts to products and processes of own work.	
PLO36	identify and appropriately address ethical issues;	
PLO37	describe examples and benefits of diversity and multiculturalism;	
PLO38	describe and adapt inter-personal interactions based on knowledge of the cultures and customs of other countries.	

#### **Semester Schedules**

#### Stage 1 / Semester 1

Mandatory			
Title			
Cloud Architecture			
Data Centre Infrastructure			
Virtual Server Technology			

#### Stage 1 / Semester 2

Mandatory			
Module Code	Title		
COMP 18003	Data Storage Technologies		
COMP 18009	Enterprise Governance & Compliance		