Aston University REG/03/53(2)

Quality and Standards Committee

Module Specification

School and Subject Group		School of Engineering and Applied Science, Electronic Engineering	
Module Code		EE404B	
Module Title		Introductory Programming	
Module Type		Taught	
Date of introduction of new module		2001	
Level		MSc	Credit Value: 10
Programme(s) in which module is available		MSc in Telecommunications Technology MRes in Photonic Network Systems MSc in Telecommunications Technology (Distance Learning) MSc in Data Communications Networks MSc in Data Communications Networks (Distance Learning)	
Involvement of Other Schools		None	
Resource Split			
Name of Module Co-ordinator		E Turitsyna	
Name of Module Advisor		V. Mezentsev	
Related Modules	Pre-requisites	None	
	Co-requisites	None	
	Prohibited Combinations	None	
Minimum and Maximum Intake Sizes		None – None	

Aims of the Module

To examine the issues involved in object oriented design and programming. Students completing this course will be able to structure software according to the object-oriented paradigms. An introduction to programming in JAVA, from an object-oriented viewpoint.

Summary of Content

- Introduction to Java, your first Java program
- Language Basics (variables, statements, data types)
- Control flow (if/else statements, for and while loops)
- Object-Oriented Concepts (Classes, Objects, creating Classes)
- Arrays, Exceptions
- More about OOP, input/output
- Networking with Java
- Inheritance, Abstract classes, Polymorphism
- Introduction to GUI programming
- Introduction to Applets, Threads
- Vector class, StringBuffer class, Working with files

Summary of Methods and Frequency of Teaching	**Lectures** 18 hours. **Practicals** 18 hours.

Summary of Methods of Assessment

Assessment Type	*Status*	*%*	*Requirements*	*Due*
Formal Examination	Compulsory	75.0	Exam. 1.5hr formal examination	17 Dec 2009
Laboratory	Compulsory	25.0	Laboratory.	03 Dec 2009

Module Outcomes - what the student should gain from successful completion of the module:	Learning and Teaching and Assessment Strategies to enable outcomes to be achieved and demonstrated	
	Learning and Teaching Methods	Assessment Methods

A. Knowledge and Understanding		
how to structure software according to the object-oriented paradigms	Lectures, Practicals	Formal Examination, Laboratory
B. Intellectual Skills		
C. Professional Skills		
apply their knowledge of the principles underlying modern data networks	Practicals	Laboratory
D. Transferable Skills		

Please provide either or both of:	
(i) Introductory Learning Resources	
(ii) Core Texts	1. "Java Gently for Engineers and Scientists", Judith Bishop, Addison Wesley, ISBN: 0201343045 2. "The Java Tutorial", Mary Campione, Kathy Walrath, Addison Wesley, ISBN: 0201703939 3. "On to Java" , Patrick Henry Winston, Sundar Narasimhan, Addison Wesley, ISBN: 0201725932
Reading Lists	Attached
Specification completed by:	Dr. John A.R. Williams
Date	22-Apr-2009
Date module approved by Teaching Committee(s)	
Date module approved by School Board(s)	