**M30235 Programming Applications and Programming Languages**

**Part 2**

**Teaching Plan**

**Week 01**

Lecture 01: Introduction to programming languages

Lecture 02: Evaluation of programming languages

**Week 02**

Lecture 03: Language implementation and compilation

Tutorial 01: Exercises

**Week 03**

Lecture 04: Lexical analysis – regular expressions

Lecture 05: Lexical analysis – DFA

**Week 04**

Lecture 06: Language syntax description

Tutorial 02: Exercises

**Week 05**

Lecture 07: Top-down parsing

Lecture 08: Bottom-up parsing

**Week 06**

Lecture 09: Names, binding and scopes

Tutorial 03: Exercises

**Week 07**

Lecture 10: Elementary data types

Lecture 11: Compound data types

**Week 08**

Lecture 12: Abstract data type

Tutorial 04: Exercises

**Week 09**

Lecture 13: Expressions and assignment

Lecture 14: Statement level control structures

**Week 10**

Lecture 15: Subprograms and parameter passing

Tutorial 05: Exercises

**Week 11**

Lecture 16: Concurrency

Lecture 17: Logic programming

Note: The order of the sessions might change slightly according the pace of delivery.