

## Data for Cathedral programme - 4 - 1 hr sessions

Colour coding: Execute

### Grade 5

Fibonacci encoding

### Grade 6

Die hard

### Grade 7

Truth tables to logic ga

Finite state machines

Ternary cards trick and emphasis on  
number of bytes used in the  
computer  
and other place value systems

Machine learning

Map colouring

Dijkstra's shortest path

Symbolic Logic

OOP

XOR gate and applications

AI

### Extra topics

Identify perfect squares

Dyck path

8 queens

Nim

Functional programming

Java script game

ed and have material ready