## YR 10, 11, 12 and 13 LEARNING JOURNEY KS4 & KS5 St Michael's Catholic School – GCSE and A-Level in Computer Science Components Paper 1 – Computer Systems (40%) Paper 2 – Algorithms & Programming (40%) Paper 3 - Programming Project (20% **A-Level** Focused on mastering all topics and completing NEA Computer Science Skills and knowledge Building 1.1 Processors, IO & storage Year 13 1.2 Software & software development 1.3 Exchanging data 1.4 Data types, structures and algorithms 1.5 LMCE Focused on introducing all topics Year 12 Skills and knowledge building - Paper 2 2.1 Computational thinking 2.2 Problem solving and programming 2.3 Algorithms Components Skills and knowledge building - Paper 1 Paper 1 – Computer 1.1 Systems architecture Systems (40%) 1.2 Memory and storage Year 11 Paper 2 – Algorithms 1.3. Networks and protocols & Programming 1.4 Network security (40%) 1.5 System software 1.6 ELCE Focused on mastering all topics **GCSE** Computer Science **Components** Paper 1 – Computer Skills and knowledge building - Paper 2 Year 10 systems (50%) 2.1 Algorithms Paper 2 -2.2 Programming Computational 2.3 Robustness thinking, algorithms 2.4 Boolean logic and programming 2.5 Programming languages and IDEs Focused on introducing all topic Paper 1 – Computer systems (50%) Paper 2 – Computational thinking, algorithms and programming (50%) **Department of Business and Computing**