National Centre for Computing Education

Raspberry Pi

Teach Computing Curriculum Journey

Key

- **AL** Algorithms
- **CS** Computing systems
- **CM** Creating media
- **DI** Data and information
- **DD** Design and development
- **ET** Effective use of tools
- **NW** Networks
- **PG** Programming
- **SS** Safety and security
- **IT** Impact of technology

Computing
GCSE CS: Programming
GCSE CS: Theory

KS4

- T level
- BTEC
- Apprenticeship
- A level

Next steps

- OOP (optional) **AL, PG**
- HTML **AL, PG**
- Security **NW, SS**
- Databases and SQL **PG, DI**
- Networks **NW, CS**
- Programming: 6 **PG, AL**
- Impacts of technology **IT, CS**
- Project management **ET, DD**
- Spreadsheet modelling **DI, DD**
- Media **CM, DD**

Year 11

- IT and the world of work **DD, IT**
- Online safety **IT, SS**
- Programming: 1–5 **PG, AL**
- Data representation **DI, AL**
- Algorithms **PG, AL**
- Computer systems **CS, AL**

KS3

Year 10

- Python programming with sequences of data **AL, PG**
- Data science **DD, DI**
- Cybersecurity **SS, IT**
- Physical computing **CS, PG**
- Representations: going audiovisual **AL, PG**
- Media: animations **ET, CM**

Year 9

- Mobile app development **ET, PG**
- Introduction to Python programming **AL, PG**
- Representations: from clay to silicon **CS, DI**

Year 8

- Computing systems **PG, CS**
- Developing for the web **CM, PG**
- Design vector graphics **CM, ET**
- Modelling data: spreadsheets **ET, CM**
- Programming essentials: part II **AL, PG**
- Programming essentials: part I **AL, PG**
- Using media: gaining support for a cause **IT, ET**
- From semaphores to the internet **NW, CS**
- Collaborating online respectfully **ET, SS**

Year 7

- Sensing **PG, CS**
- 3D modelling **ET, CM**
- Variables in games **PG, DD**
- Introduction to spreadsheets **ET, DI**
- Webpage creation **CM, DD**
- Internet communication **NW, ET**
- Programming quizzes **PG, DD**
- Making music **CM, DD**
- Pictograms **DI, ET**

KS2

Year 6

- Sharing information **NW, ET**
- Selection in physical computing **PG, CS**
- Vector drawing **ET, CM**
- Video editing **CM, DD**
- Flat-file databases **DI, ET**
- Selection in quizzes **AL, PG**

Year 5

- Repetition in games **PG, DD**
- Photo editing **ET, CM**
- Data logging **CS, DI**
- Repetition in shapes **AL, PG**
- Audio editing **ET, CM**

Year 4

- The internet **NW, SS**
- Events and actions in programs **PG, DD**
- Desktop publishing **ET, CM**
- Branching databases **DI, ET**
- Sequencing sounds **PG, DD**
- Stop-frame animation **ET, CM**
- Connecting computers **NW, CS**

Year 3

KS1

Year 2

- Technology around us **CS, AL**
- Digital painting **ET, CM**
- Moving a robot **AL, PG**
- Grouping data **DI, AL**
- Digital writing **ET, CM**
- Programming animations **PG, DD**
- Information technology around us **NW, CS**
- Digital photography **ET, CM**
- Robot algorithms **AL, PG**

Year 1