AAQ Application Development

Course Overview

- **Exam Board** : OCR
- **Usual Age Range** : 16-19
- **Qualification :** 1 L3 AAQ (equivalent to 1 A level)
- **Curriculum Time** : Five 50 minute lessons per week in class plus additional work in Independent Learning Time
- **Assessment** : this curriculum is assessed via:
    - 2 x 1 hour 30 minute exams
    - 3 x Non-Examined extended project
- **Grading** – D*-P
- **Full specification** - https://www.ocr.org.uk/qualifications/cambridge-advanced-nationals/computing-application-development-level-3-h029-h129/qualification-at-a-glance/#extended-certificate

Curriculum Intent

The overarching intent of the OCR AAQ in Application Development Extended Certificate is to cultivate a new generation of adaptable, innovative, and highly skilled computing professionals. This qualification aims to equip learners with a robust foundation in application development principles, practices, and technologies, fostering both their academic potential and vocational readiness. We aspire for our students to not only understand *how* applications are built but also *why* they are essential, developing the critical thinking and problem-solving abilities necessary to thrive in a rapidly evolving digital landscape.

This curriculum is designed to provide learners with comprehensive knowledge across key areas of application development:

- **Fundamentals of Application Development:** Students will gain a deep understanding of core programming concepts, data structures, algorithms, and the software development lifecycle, from requirements gathering to deployment and maintenance.
- **Developing Application Software:** Learners will acquire theoretical and practical knowledge of various programming paradigms, software design principles, testing methodologies, and debugging techniques essential for creating functional and robust applications.
- **User Experience (UX) and User Interface (UI) Design:** A critical focus will be placed on understanding user-centred design principles, accessibility considerations, wireframing, prototyping, and effective communication of UX/UI solutions.
- **Specialised Application Domains:** Through optional units, students will explore specific application areas such as:
    - **Game Development:** Understanding game design principles, development tools, and interactive storytelling.
    - **Advanced Software Development:** Deeper dives into specific programming languages, frameworks, or software engineering practices.

Remote Learning and Revision

Students will benefit additional study of A level theory content for the exam revision and also if they are absent from the UTC but well enough to complete remote learning. Students can communicate with the teacher via TGoogle Classroom or via email if absent from school.

Curriculum Overview

The learning in AAQ Application Development is sequenced as follows.

Note: the full Curriculum Plans are available on request to info@nef.tynecoast.academy

Key Topics

- Fundamentals of Application Development
- Developing Application Software
- User Experience (UX) and User Interface (UI) Design
- Game Development
- Software Development

Year 12:

- **Fundamentals of Application Developement (exam)**
- **User Experience and User Interface Design (NEA)**
- **Begin Game Developement (NEA)**

Year 13:

- **Finish Game Development (NEA)**
- **Developing Application (Exam)**
- **Software Development (NEA)**