

H8ACSD: Advanced Client Side Development

| | |
|---|---|
| Module Code: | H8ACSD |
| Long Title | Advanced Client Side Development APPROVED |
| Title | Advanced Client Side Development |
| Module Level: | LEVEL 8 |
| EQF Level: | 6 |
| EHEA Level: | First Cycle |
| Credits: | 5 |
| Module Coordinator: | |
| Module Author: | Isabel O'Connor |
| Departments: | School of Computing |
| Specifications of the qualifications and experience required of staff | Master's and/or PhD degree in computing or cognate discipline. May have industry experience also. |
| Learning Outcomes | |
| <i>On successful completion of this module the learner will be able to:</i> | |
| # | Learning Outcome Description |
| LO1 | Utilise client side frameworks to create interactive user interfaces |
| LO2 | Manipulate and visualise data in various forms |
| LO3 | Evaluate relevant frameworks for the creation of specific projects |
| LO4 | Design and implement test strategies for client side web applications |
| Dependencies | |
| Module Recommendations | |
| No recommendations listed | |
| Co-requisite Modules | |
| No Co-requisite modules listed | |
| Entry requirements | See section 4.2 Entry procedures and criteria for the programme including procedures recognition of prior learning. |

H8ACSD: Advanced Client Side Development

| Module Content & Assessment | | | |
|---|----------------------|---------------------------|------------|
| Indicative Content | | | |
| Frameworks Overview Frameworks vs toolkits. React JS. Angular. Server vs client. History & future | | | |
| Frameworks 2 Compatibility issues. Optimisation. Basic Data Visualisation | | | |
| CSS Advanced selectors. Flexbox design | | | |
| CSS 2 Preprocessors. DRY. SASS. LESS | | | |
| Advanced Client Side Emerging trends. HTML5/CSS3. Geolocation. Local storage. Canvas | | | |
| Data Visualisation/Manipulation Data sources. JSON. XML. API's. CORS | | | |
| Data Visualisation 2 Visualisation frameworks. jQuery Mobile. HighCharts | | | |
| JavaScript libraries What is a library. Sample libraries (eg jQuery). Animation. Queing. Dom manipulation | | | |
| Testing Client side testing strategies. Client side testing frameworks | | | |
| Project Project topic presentations & feedback | | | |
| PBL Project PBL Project Session | | | |
| Project presentations Project presentations | | | |
| Assessment Breakdown | | | % |
| Coursework | | | 100.00% |
| Assessments | | | |
| Full Time | | | |
| Coursework | | | |
| Assessment Type: | Formative Assessment | % of total: | Non-Marked |
| Assessment Date: | n/a | Outcome addressed: | 1,2,3,4 |
| Non-Marked: | Yes | | |
| Assessment Description: Formative assessment will be provided on the in-class individual or group activities | | | |
| Assessment Type: | Test | % of total: | 40 |
| Assessment Date: | n/a | Outcome addressed: | 1,2 |
| Non-Marked: | No | | |
| Assessment Description: Learners must complete an open book assessment in which they build a client side user interface based on given criteria and visualise data taken from a specific data source | | | |
| Assessment Type: | Project | % of total: | 60 |
| Assessment Date: | n/a | Outcome addressed: | 1,2,3,4 |
| Non-Marked: | No | | |
| Assessment Description: In groups of 2, learners must design and develop a useful web application that pulls from several data sources. The project must be backed up by a report/presentation in an appropriate format which details both design and testing strategies | | | |
| No End of Module Assessment | | | |
| No Workplace Assessment | | | |
| Reassessment Requirement | | | |
| Coursework Only <i>This module is reassessed solely on the basis of re-submitted coursework. There is no repeat written examination.</i> | | | |
| Reassessment Description This module is reassessed solely on the basis of re-submitted coursework. There is no repeat written examination. Learners who fail this module will be required to sit a repeat module assessment where all learning outcomes will be examined. Learners must repeat the project on an individual basis | | | |

H8ACSD: Advanced Client Side Development

| Module Workload | | | | |
|--------------------------------------|------------------------------------|-------|--------------|---------------------------------|
| Module Target Workload Hours 0 Hours | | | | |
| Workload: Full Time | | | | |
| Workload Type | Workload Description | Hours | Frequency | Average Weekly Learner Workload |
| Lecture | Classroom & Demonstrations (hours) | 24 | Per Semester | 2.00 |
| Tutorial | Other hours (Practical/Tutorial) | 24 | Per Semester | 2.00 |
| Independent Learning | Independent learning (hours) | 77 | Per Semester | 6.42 |
| Total Weekly Contact Hours | | | | 4.00 |

Module Resources

Recommended Book Resources

Christian Johansen. (2011), Test-driven JavaScript Development, Addison-Wesley Professional, p.497, [ISBN: 978-0321683915].

Eve Porcello. Alex Banks. Learning React, 1st Edition, [ISBN: 9781491954614].

This module does not have any article/paper resources

This module does not have any other resources

Discussion Note: