



FALMOUTH  
UNIVERSITY



Computing Subject Area  
**Induction**

# Computing Subject Area

Welcome!

You are here because you have enrolled on one of the following courses:

- ▶ BA(Hons) Game Development: Programming
- ▶ BSc(Hons) Computer Science
- ▶ BSc(Hons) Computing for Games
- ▶ BSc(Hons) Data Science
- ▶ BSc(Hons) Immersive Computing
- ▶ BSc(Hons) Robotics

All of these courses have a common first-year focused on computing fundamentals and practical projects, and some have the option for a year of professional practice.

# Computing Subject Area

The ACM define the ‘computing professional’ as:

Someone belonging to a broad discipline that crosses the boundaries between mathematics, science, engineering, and business. They embody important professional competencies lying at the foundation of goal-oriented activities requiring, benefiting from, or creating computation. Computation being any type of calculation that includes both arithmetical and non-arithmetical steps following a well-defined model, typically an algorithm.

You are here because you want to become a **computing professional**.

# Computing Subject Area

The discipline consists of five sub-disciplines:

- ▶ Computer Engineering
- ▶ Computer Science
- ▶ Information Systems
- ▶ Information Technology
- ▶ Software Engineering

Roles such as *games programmer*, *web developer*, or *roboticist* usually draw on several of these sub-disciplines with different emphases.

# Learning Outcomes

By the end of this session, you should be able to:

- ▶ **Recognise who** your course team is
- ▶ **Outline what** the Games Academy offers from a computing perspective
- ▶ **Explain** the career paths **and** key learning objectives that our computing courses cater to
- ▶ **Suggest** some of the kinds of question that excite scholars within and around the computing discipline
- ▶ **Recall** the structure of the course

# Learning Outcomes

By the end of this session, you should be able to:

- ▶ **Contrast** what is expected of students in the higher education context to the compulsory education context
- ▶ **Reflect upon how** to invest sufficient time in both course activities **as well as** self-regulated deliberate practice to achieve key goals
- ▶ **Remember** to go to the DoIT Profiler session (*next!*) to identify your individual learning differences

# Course Tutors





Dr Douglas Brown, Director of the Games Academy



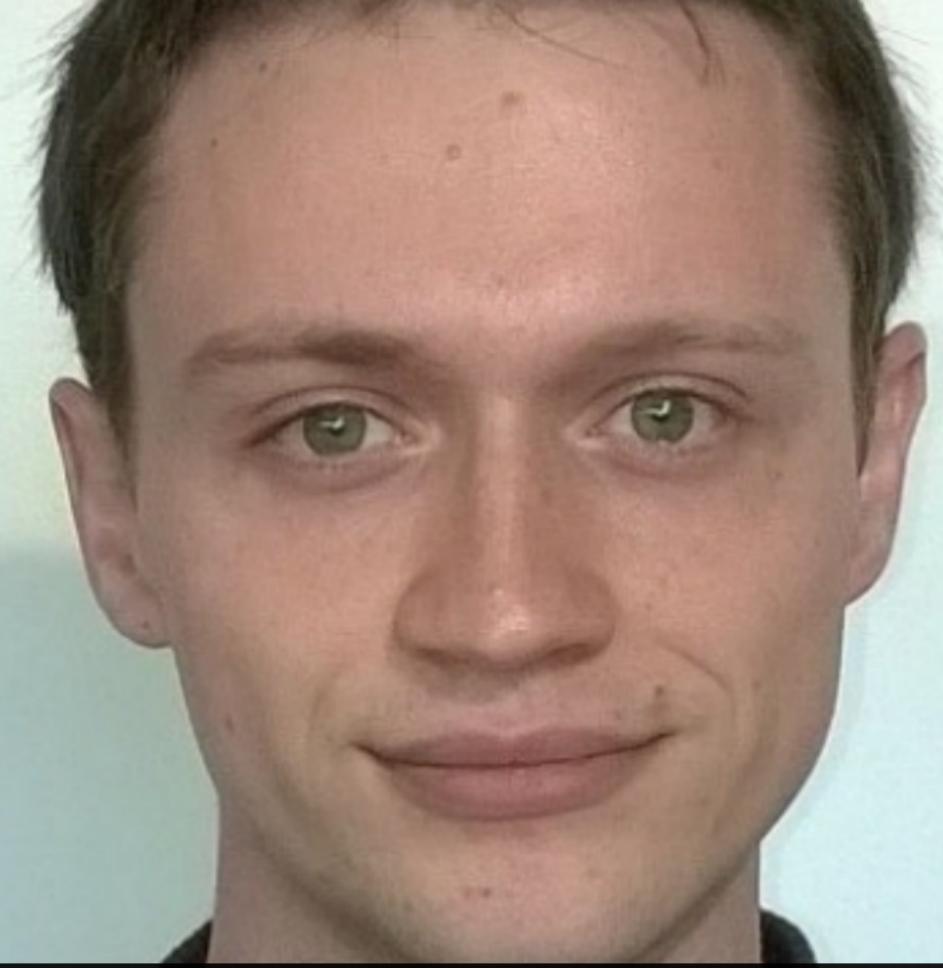
Dr Michael Scott, Head of Computing & Associate Professor of Computer Science Education



Brian McDonald, Head of Games



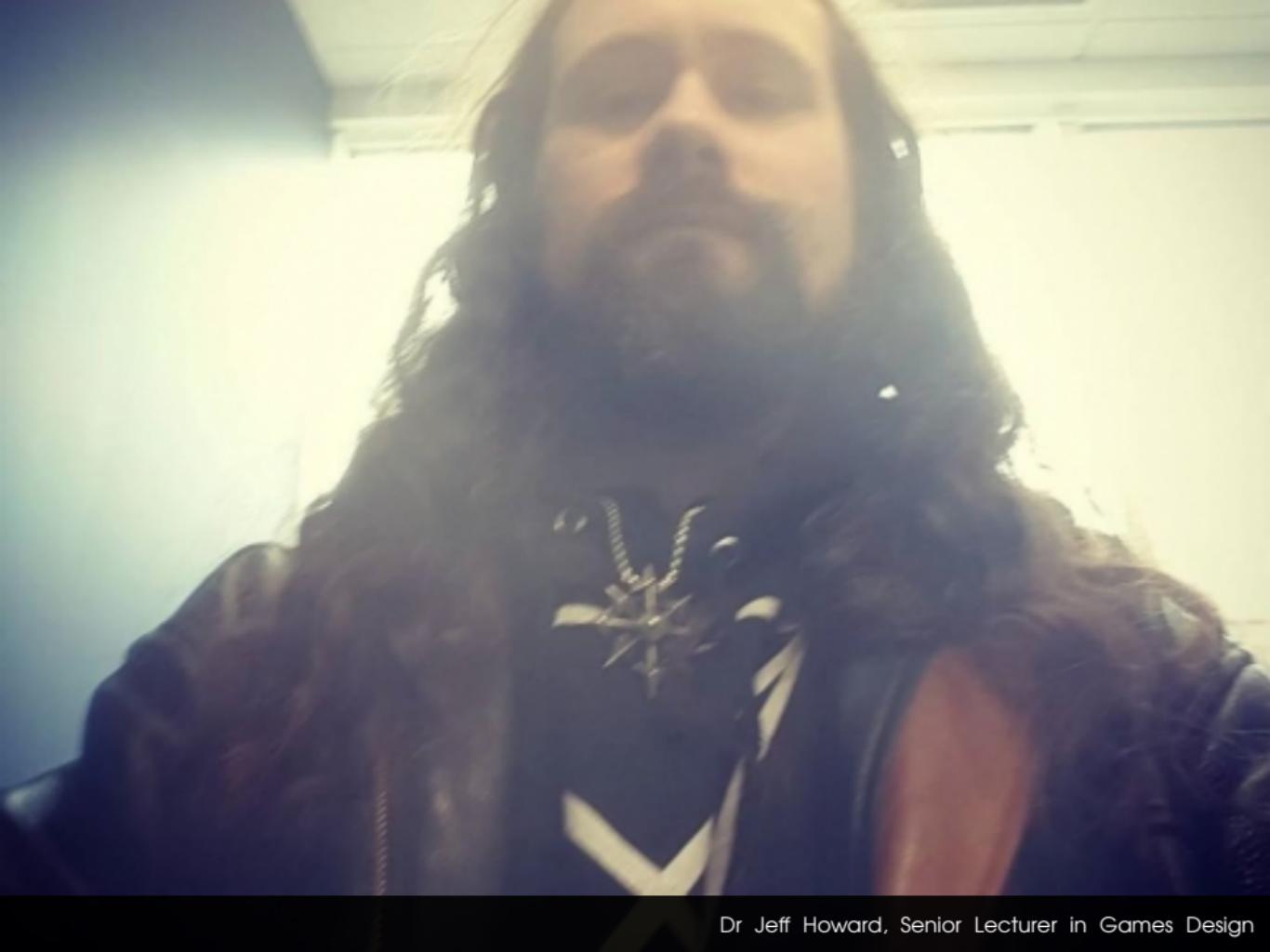
Dr Ed Powley, Associate Professor of Artificial Intelligence



Dr Rory Summerley, Undergraduate Courses Leader



Andy Smith, Technical Facilities Manager



Dr Jeff Howard, Senior Lecturer in Games Design



Terry Greer, Senior Lecturer in Games Design



Dr Joseph Walton-Rivers, Lecturer in Game Programming



Dr Emre Khalil, Lecturer in Game Programming



Matt Watkins, Lecturer in Robotics & Creative Computing



John Speakman, Lecturer in Computer Graphics



Sokol Murturi, Lecturer in Computer Science



Gareth Lewis, Lecturer in Indie Games & User Experience Design (Online)



Warwick New, Associate Lecturer - Computing



Paul Hedley, Associate Lecturer - Game Design & Programming



Lucy Stent, Research Student Teaching Associate - Integrated Foundation Year



Alexander Mitchell, Research Student Teaching Associate - Computing



Archie Andrews, Technician (Version Control & Programming)



Ben Green, Technician (Hardware & Robotics)

# The Games Academy





**World-Leading** Research  
in Digital Games, Creative  
Technology and Immersive  
Experience Design

Awarded more than £7 million in funding for research in areas such as **Artificial Intelligence, Transmedial Aesthetics, Creative Communities** in the last 7 years

sign



8 x 30



→ 2 → 1



≤ 8 ≤ 1



∨ 0 ∨ 0

No controller collisions



Guitar Birds



15 / 15  
音量



Win: 70pts

Ends: 40s

Lives: 3



2.6 2.6



And hold funding for several labs for research into **Immersive Technology Applications and Esports Livestreaming**

DIGRA 2015

DIGRA 2

**KEYNOTES**

Thursday, May 1

Friday, May 1

Saturday, May 2

Sunday,

**KEYNOTES**

Thursday, May 14

Friday, May 15

Saturday, May 16

Sunday, May 17

Tanya Krzywinska (Falmouth U)

The Gamification of the Game

Astrid Esselink (Banger Universi

Videogames as Unnatural H

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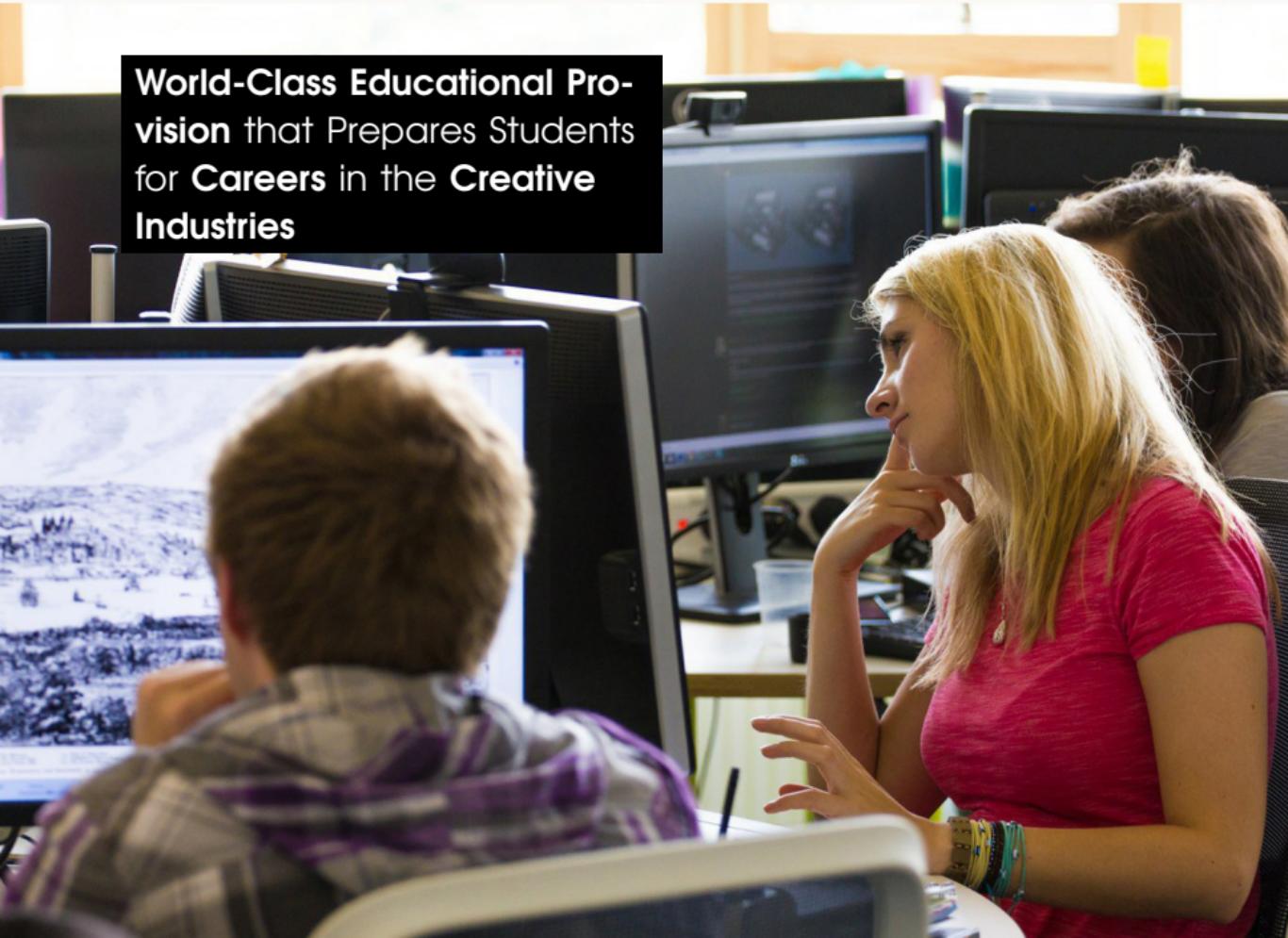
Is Hacking the Brain the Fa

Markus Rautzenberg (Freie U

Dealing with Uncertainty, U

Lead By World-Renowned  
Researchers

**World-Class Educational Pro-  
vision** that Prepares Students  
for **Careers** in the **Creative  
Industries**



# Awarded TEF Gold Status



Teaching  
Excellence  
Framework

# The Princeton Review®





Undergraduate Courses in  
**Computing**



Undergraduate Courses in  
**Games**



**Undergraduate Courses in  
Immersive Experiences**



Undergraduate Courses in  
**Computer Science**



Undergraduate Courses in  
**Data Science\***



Undergraduate Courses in  
**Robotics**



Postgraduate Courses in  
**Artificial Intelligence**

```

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415 ReadController:
416 ;a(d key) b(f key) select start up down left right
417 LDA JOYPAD1
418 LSR A
419 ROL joypad1_state
420 INX ; Increment count
421 CPX #8 ; Compare X to 8
422 BNE ReadController ; If not equal, return to function
423
424 ; React to Left button
425 LDA joypad1_state
426 AND #BUTTON_LEFT
427 BEQ ReadLeft_Done
428 LDA is_animating ; If already animating skip to next
429 CMP #1
430 BEQ ReadLeft_Done
431 LDA is_grounded
432 CMP #1
433 BEQ .DoTrick_Brake
434 ; Else do BSFLIP if !is_grounded
435 Animation_SetUp #ANIM_OFFSET_BSFLIP, #TOTAL_ANIM_TILES_BSFLIP
436 LDA #1
437 STA is_performing_trick
438 STA is_fakie ; To tell the landing animation which air
439 JMP ReadLeft_Done
440 .DoTrick_Brake
441 Animation_SetUp #ANIM_OFFSET_BREAK, #TOTAL_ANIM_TILES_BREAK
442 LDA #LOW(BRAKE_FORCE)
443 STA forward_speed
444 LDA #HIGH(BRAKE_FORCE)
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Postgraduate Courses in  
Game Programming\*



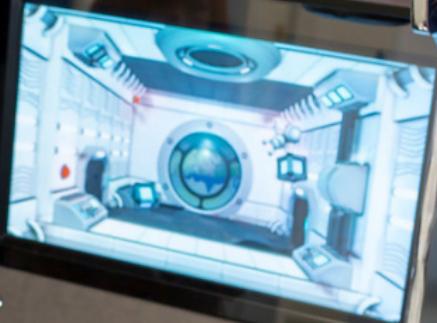
Postgraduate Courses in  
**Games Entrepreneurship and  
Incubation**



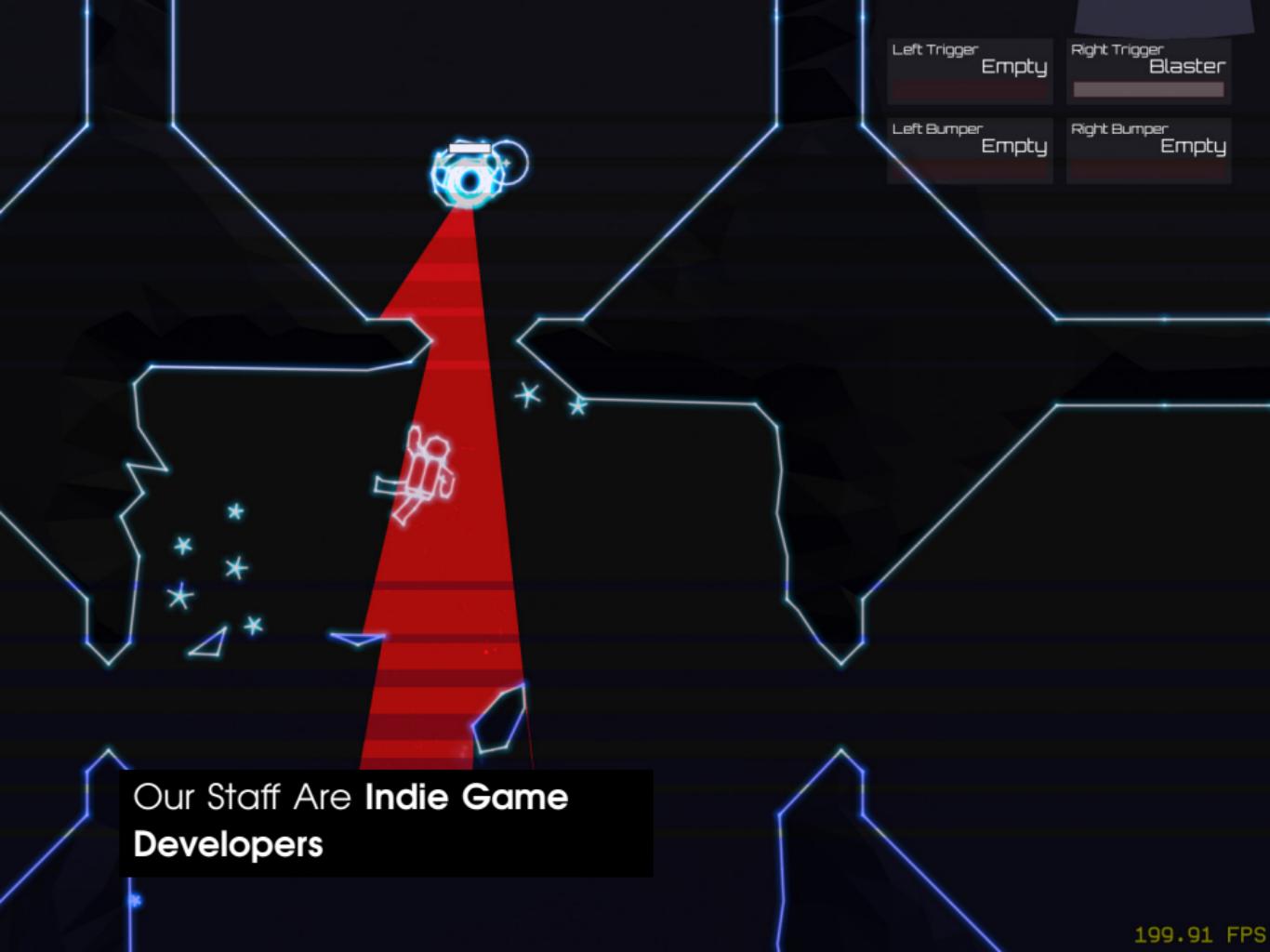
Distance-Learning Courses in  
**User Experience Design** and  
**Indie Games**

FALMOUTH  
UNIVERSITY

GAMES  
ACADEMY



Emphasis on **Doing It For Real**



Left Trigger

Empty

Right Trigger

Blaster

Left Bumper

Empty

Right Bumper

Empty

Our Staff Are **Indie Game**  
**Developers**

199.91 FPS



Our Staff Are **Indie Game Developers**



Our Staff Are Indie Game Developers



jerba

A photograph of a middle-aged man with short brown hair, wearing a light purple button-down shirt over a white t-shirt, standing and gesturing with his hands while speaking. To his right is a large screen displaying a close-up of a woman's face with a surprised or intense expression. The background shows an indoor setting with a window and some furniture.

We Attract **Industry Legends**  
as Visiting Lecturers

SHARP

A close-up photograph of a man with a beard and mustache, wearing a black bowler hat and a dark jacket. He is speaking into a black microphone. The background is blurred, showing what appears to be a stage or event setting with other people and lights.

We Attract **Industry Stars** as  
Keynote Speakers



And **Our Graduates** Return to  
Help Us Out

# The UK Creative Industries 2019

# VALUE

## Value (GVA\*)

The UK Creative Industries 2019

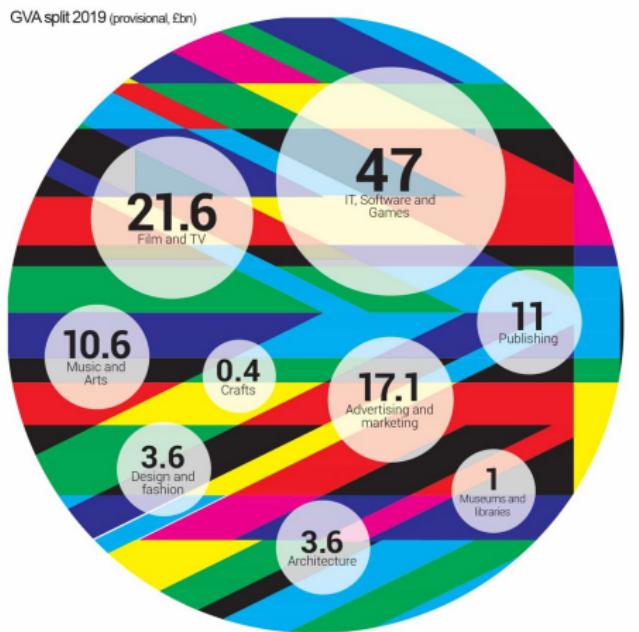
£115.9 bn  
A YEAR

£13.2 m  
AN HOUR

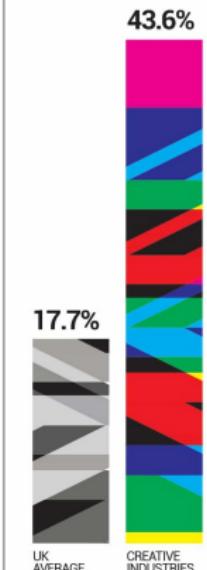
5.6%  
INCREASE IN VALUE SINCE 2018\*\*

\*Gross Value Added, current prices

\*\*Calculated using chained volume measures



Change in GVA 2010-2019\*\*



[www.thecreativeindustries.co.uk](http://www.thecreativeindustries.co.uk)

Source: DCMS, December 2020

# TECH NATION

FROM  
TECH CITY

IN PARTNERSHIP WITH  
Nesta...

## DIGITAL TECH ECONOMY

**1.56m** jobs<sup>1</sup>

Job creation **2.8x** faster than the rest of the economy (2011-2014)



**£50,000**

Almost £50K average advertised salary<sup>2</sup>

**36%**

higher than the national advertised average<sup>2</sup>

Digital Tech Economy jobs exist within traditionally non-digital industries<sup>1</sup>

**41%**

## DIGITAL TECH INDUSTRIES

**£161bn** turnover<sup>3</sup>

**32%**

Grew 32% faster than the rest of the economy (2010-2014)<sup>3</sup>

**58,000**

Identified active digital tech businesses<sup>4</sup>

### TOP SECTORS<sup>4</sup>

17% App & Software Development

12% Data Management & Analytics

11.5% Hardware, Devices & Open Source Hardware

### DIGITAL TURNOVER TOTAL<sup>3</sup>

**£62.4bn**

READING & BRACKNELL

**£10bn**

BRISTOL & BATH

**£8.2bn**

MANCHESTER

**£2.2bn**

BIRMINGHAM

**£1.8bn**

### DIGITAL TURNOVER GROWTH (2010-2014)<sup>3</sup>

SOUTHAMPTON

**+180%**

TRURO, REDRUTH & CAMBORNE

**+153%**

DUNDEE

**+129%**

LONDON

**+101%**

BRISTOL & BATH

**+53%**



**58,000** digital tech businesses found across the UK

**DIGITAL JOBS<sup>1</sup> TOTAL**

**328,223**

MANCHESTER

**51,901**

READING & BRACKNELL

**40,440**

BIRMINGHAM

**36,768**

BRISTOL & BATH

**36,547**

**PRODUCTIVITY<sup>3</sup> (SALES PER WORKER)**

**£296,340**

LONDON

**£205,390**

READING & BRACKNELL

**£196,800**

SOUTHAMPTON

**£171,720**

OXFORD

**£170,460**

**DIGITAL SALARY<sup>2</sup> GROWTH (2012-2015)**

**LEEDS +29%**

NEWCASTLE & DURHAM +27%

SUNDERLAND +26%

EDINBURGH +26%

SOUTHAMPTON +25%

<sup>1</sup> Annual Population Survey (2014)

<sup>2</sup> Burning Glass (2015) refers to advertised digital salary

<sup>3</sup> Annual Population Survey, Our Key Business Indicators Database (2014)

<sup>4</sup> Growthstar (2015)

# Computing in Creative Industries



# Careers

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- ▶ Digital media are complex and therefore require significant knowledge and skills to produce
- ▶ They bring together art, storytelling, design and computing
- ▶ Roles are therefore quite diverse and specialised
- ▶ Each role requires very specific skills, mastered in considerable depth

# Careers

It is important to note that:

- ▶ Digital media are complex and therefore require significant knowledge and skills to produce
- ▶ They bring together art, storytelling, design and computing
- ▶ Roles are therefore quite diverse and specialised
- ▶ Each role requires very specific skills, mastered in considerable depth
- ▶ In small indie studios, you might need to fill multiple roles, including business and design

# Careers

It is important to note that:

- ▶ Digital media are complex and therefore require significant knowledge and skills to produce
- ▶ They bring together art, storytelling, design and computing
- ▶ Roles are therefore quite diverse and specialised
- ▶ Each role requires very specific skills, mastered in considerable depth
- ▶ In small indie studios, you might need to fill multiple roles, including business and design
- ▶ Knowledge of effective team-working tactics is essential (though there are many ways of working)

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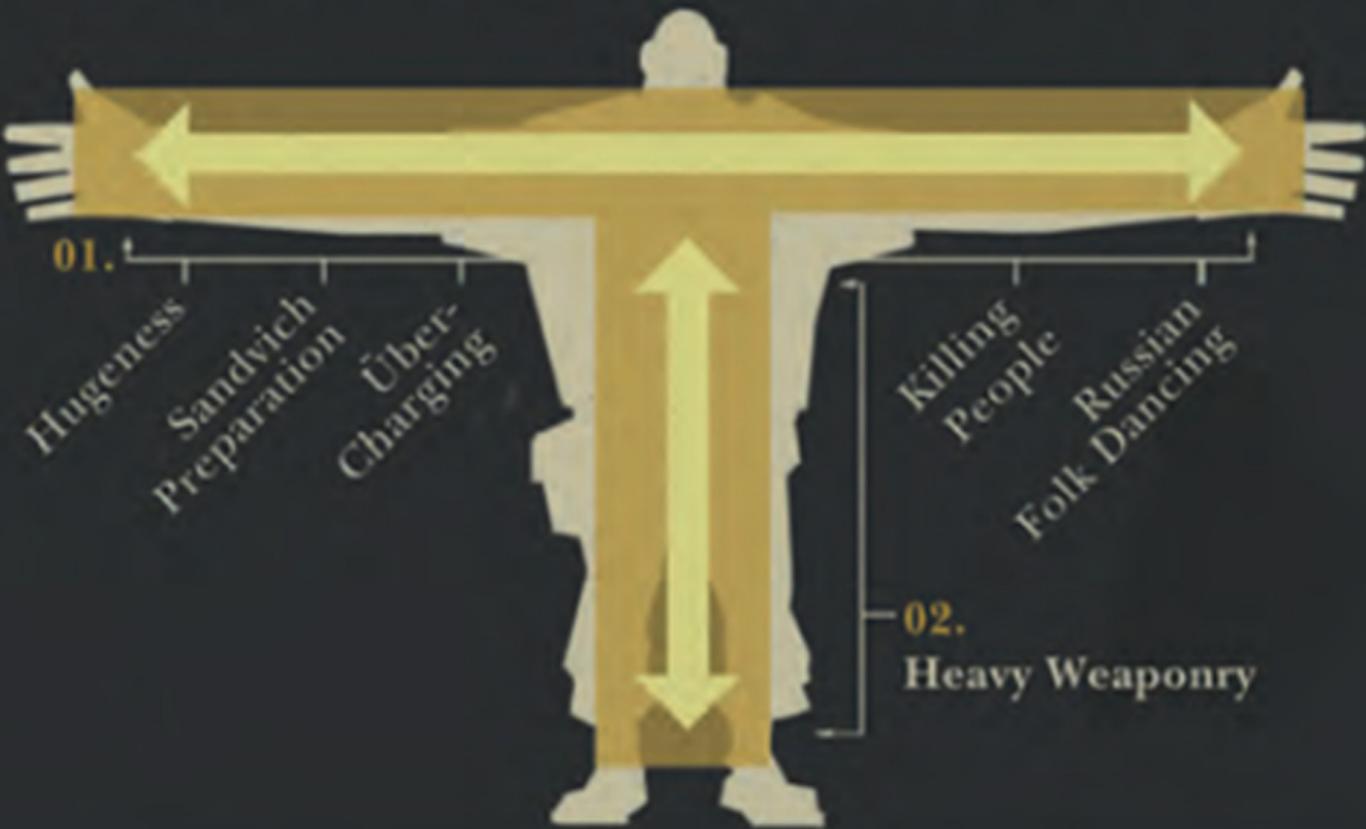
- ▶ Deal with the technical side of creative development
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- ▶ Keep up with the fast-paced field of computer technology
- ▶ Straddle the arts and sciences, being able to draw together elements from both
- ▶ Have expertise in software engineering and computer science, with an ability to conduct independent research

# T-SHAPED MODEL: EMPLOYEE



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- ▶ **Manage:** insight into how software developers practice their craft will make you better at managing them in a studio context (and perhaps even garner some respect)
- ▶ **Administratate:** the games industry isn't just about development, there is a huge range of other career paths, such as human resources and IT

# Potential Career Trajectories

This is a sampling of technical roles which our graduates have secured:

- ▶ AI & Systems Programmer, Nordcurrent
- ▶ Augmented Reality App Developer, Ndreams
- ▶ Back-End Developer, Codices
- ▶ Chief Technical Officer, Studio Mutiny
- ▶ Creative Software Developer, Ultrahaptics
- ▶ Data Management Lead, Pineapple Studios
- ▶ Data Scientist, Solutionpath
- ▶ Developer, Antoine Lock
- ▶ DevOps Specialist, SCC Scripting
- ▶ Doctoral Candidate in AI, Google
- ▶ Freelance Programmer, Square Enix
- ▶ Full Stack Web Developer, Dewsight
- ▶ Game Designer, Supermassive
- ▶ Game Designer, Firesprite
- ▶ Games Programmer, FunGeneration Lab

# Potential Career Trajectories

This is a sampling of technical roles which our graduates have secured:

- ▶ Graduate Programmer,  
Ubisoft
- ▶ Graduate Programmer,  
Firesprite
- ▶ Hardware Engineer, BAE  
Systems
- ▶ Indie Game Developer,  
Knights of Borria
- ▶ Immersive Technologist,  
Facebook
- ▶ IT Support Administrator,  
Subfero
- ▶ Junior Game Designer, Rare
- ▶ Junior Programmer,  
Mediatonic
- ▶ Lead Programmer, Robot  
Noodle
- ▶ Level Designer, King
- ▶ Producer, Coffee Stain Studios
- ▶ Python Automation Engineer,  
Imagination Tech
- ▶ Software Developer, Bluefruit
- ▶ Software Engineer, Tempest
- ▶ Support Analyst for Cloud,  
SolicitorsOS



E T K  
S A I



KNIGHTS  
OF  
BORRIA

# RUST BREAKER

SUPER-ALPHA  
DEMO





# KAYA'S VALE

# Your Course



# Student Voice

- ▶ I want the course to be #1 in every measure, so please engage with us!
- ▶ Most of the COMP modules we offered were in the top-10% of all modules Falmouth offers, as rated by student evaluations
  - ▶ COMP250: Artificial Intelligence in top-1%
- ▶ About 25% contact-time on all modules

You will soon be asked nominate someone to represent your interests in the student-staff liaison group. There are representatives for each cohort. Establishing a working democracy is vital important to the health of your student experience. You *shape* the course!

# You Said, We Did

Improvements this year based on NSS data:

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  - ▶ Briefs supplemented with more open-ended “challenges and opportunities” and new rubrics to show how to access marks and reach higher attainment

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Improvements this year based on NSS data:

- ▶ “My course has challenged me to achieve my best work” (-13)
  - ▶ Briefs supplemented with more open-ended “challenges and opportunities” and new rubrics to show how to access marks and reach higher attainment
- ▶ “My course has provided me with opportunities to bring information and ideas together from different topics” (-1)
  - ▶ Module leaders now coordinate topics and assignments to better highlight synergies

# You Said, We Did

- ▶ “I have been able to contact staff when I needed to” (-12)
  - ▶ New policy on staff contact during term time
  - ▶ Timetabled meetings with tutors
  - ▶ Technicians have extended studio hours

# You Said, We Did

- ▶ “The course is well organised and running smoothly” (-2)
  - ▶ The *Making the Curriculum Clearer* project now implemented
  - ▶ Simplified course structure, fewer assignments, and more sharing of modules across the Academy
  - ▶ Now share group project modules - same learning outcomes, same assignment, same weight, same “studio practice”

# Programming Tutors

In study block 1, each student is allocated a tutor:

- ▶ Small group meetings each week with your tutor
- ▶ These are mandatory as they help us to nurture your progress
- ▶ Run by a member of the course team
- ▶ There to help you, only a message away
- ▶ Big help on COMP110 and GAM102, especially for newer programmers

We may juggle the groups once we get to know you all a bit better so we can offer the most appropriate support for you

# Course Objectives

The aim of our courses are to:

- ▶ To develop confident and daring computing professionals with the knowledge, attitudes, and skills needed to operate as programmers in multidisciplinary teams that produce vibrant and innovative digital products and services.

# Course Objectives

By the end of this year, you should be confidently able to:

- ▶ **Compute**: Translate technical notation and requirements into executable code.
- ▶ **Solve**: Demonstrate computational thinking and numeracy skills.
- ▶ **Advocate**: Recognise legal, social, ethical, professional and sustainability issues in projects.
- ▶ **Research**: Report findings using appropriate evidence and conventions.

# Course Objectives

By the end of this year, you should be confidently able to:

- ▶ **Reflect:** Explain professional attributes that are relevant to your goals.
- ▶ **Collaborate:** Identify your individual personal responsibility in a diverse team context.
- ▶ **Present:** Convey information using relevant presentation techniques.
- ▶ **Innovate:** Outline the importance of innovation.

# Assessment Criteria

These learning outcomes are assessed according to these different assessment criteria categories:

- ▶ Compute
- ▶ Solve
- ▶ Advocate
- ▶ Research
- ▶ Reflect
- ▶ Collaborate
- ▶ Present
- ▶ Innovate
- ▶ PROCESS
- ▶ ANALYSE
- ▶ INDUSTRY
- ▶ RESEARCH
- ▶ ORGANISATION
- ▶ COLLABORATION
- ▶ COMMUNICATION
- ▶ INNOVATION

# Philosophy

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- ▶ Emphasis on developing a community of practice that motivates ongoing discourse and peer-review between its members
  - ▶ Doing hands-on practice
  - ▶ Learning from each other
  - ▶ Critique each others' work and discuss what constitutes good practice

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- ▶ Emphasis on developing a community of practice that motivates ongoing discourse and peer-review between its members
  - ▶ Doing hands-on practice
  - ▶ Learning from each other
  - ▶ Critique each others' work and discuss what constitutes good practice
- ▶ Feed-forward over feed-back:
  - ▶ Early milestones, earlier start, more learning
  - ▶ Get advice on how to improve your own practice *before* you submit your work

# Philosophy

- ▶ Emphasis on structure:
  - ▶ Formative work across the study block
  - ▶ Straightforward to pass, challenging to master
  - ▶ Face-to-face feedback and discussion in assessment by viva

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- ▶ Emphasis on structure:
  - ▶ Formative work across the study block
  - ▶ Straightforward to pass, challenging to master
  - ▶ Face-to-face feedback and discussion in assessment by viva
- ▶ Emphasis on continuing personal and professional development:
  - ▶ Personal growth over hitting a benchmark
  - ▶ Competencies over grades
  - ▶ Qualitative over quantitative

# Course Maps



# Award Map

## STAGE 1

STUDY BLOCK 1	STUDY BLOCK 2
DEVELOPMENT FOUNDATIONS GAM101 Core 20 credits	MULTIDISCIPLINARY TEAMWORK GAM190 Core 20 credits
PRINCIPLES OF COMPUTING COMP101 Core 20 credits	DATA FUNDAMENTALS COMP170 Core 20 credits
DIGITAL CREATIVITY GAM102 Core 20 credits	INDIVIDUAL PROGRAMMING PROJECT COMP102 Core 20 credits

Common First Stage

F

# Award Map

## STAGE 2

STUDY BLOCK 1	STUDY BLOCK 2
WORLD BUILDING: PRE-PRODUCTION GAM202 Core 20 credits	COLLABORATION COMP212 Core 20 credits
FORM & EXPERIENCE GAM201 Core 20 credits	WORLD-BUILDING: PRODUCTION GAM203 Core 20 credits
ADVANCED GAME PROGRAMMING COMP206 Core 20 credits	

Game Development: Programming

F

# Award Map

## STAGE 2

STUDY BLOCK 1	STUDY BLOCK 2
WORLD BUILDING: PRE-PRODUCTION GAM202 Core 20 credits	COLLABORATION COMP212 Core 20 credits
COMPUTATIONAL MATHEMATICS COMP201 Core 20 credits	WORLD-BUILDING: PRODUCTION GAM203 Core 20 credits
ADVANCED GAME PROGRAMMING COMP206 Core 20 credits	

Computing for Games

F

# Award Map

## STAGE 2

STUDY BLOCK 1	STUDY BLOCK 2
WORLD BUILDING: PRE-PRODUCTION GAM202 Core 20 credits	COLLABORATION COMP212 Core 20 credits
COMPUTATIONAL MATHEMATICS COMP201 Core 20 credits	WORLD-BUILDING: PRODUCTION GAM203 Core 20 credits
VIRTUAL REALITY COMP211 Core 20 credits	

Immersive Computing

F

# Award Map

## STAGE 2

STUDY BLOCK 1	STUDY BLOCK 2
<b>COMPLEX PROBLEM-SOLVING</b> BUS299 Core 20 credits	<b>COLLABORATION</b> COMP212 Core 20 credits
<b>COMPUTATIONAL MATHEMATICS</b> COMP201 Core 20 credits	<b>ALGORITHMS &amp; OPTIMISATION</b> COMP203 Core 20 credits
<b>WEB TECHNOLOGIES</b> COMP202 Core 20 credits	<b>DISTRIBUTED SYSTEMS</b> COMP204 Core 20 credits

Computer Science

F

# Award Map

## STAGE 2

STUDY BLOCK 1	STUDY BLOCK 2
COMPLEX PROBLEM-SOLVING BUS299 Core 20 credits	COLLABORATION COMP212 Core 20 credits
COMPUTATIONAL MATHEMATICS COMP201 Core 20 credits	ALGORITHMS & OPTIMISATION COMP203 Core 20 credits
DATA ANALYTICS COMP271 Core 20 credits	DATA MINING COMP272 Core 20 credits

Data Science

F

# Award Map

## STAGE 2

STUDY BLOCK 1	STUDY BLOCK 2
DIGITAL PROTOTYPING SPD220 Core 20 credits	COLLABORATION COMP212 Core 20 credits
COMPUTATIONAL MATHEMATICS COMP201 Core 20 credits	ALGORITHMS & OPTIMISATION COMP203 Core 20 credits
ROBOTICS & CYBERNETICS COMP208 Core 20 credits	ROBOT DESIGN COMP209 Core 20 credits

Robotics

F

# Award Map

## STAGE 3

STUDY BLOCK 1		STUDY BLOCK 2	
<b>FUTURE SKILLS</b> <b>GAM360</b> Core 20 credits		<b>MAJOR COLLABORATION</b> <b>GAM390</b> Core 40 credits	
<b>COURSE SPECIALISM MODULE</b> <b>COMP3**</b> Core 20 credits			
<b>RESEARCH &amp; DEVELOPMENT</b>  <b>COMP302</b> Core for BSc 20 credits	<b>PROFESSIONAL PORTFOLIO</b>  <b>GAM370</b> Core for BA 20 credits	<b>RESEARCH &amp; DEVELOPMENT</b>  <b>COMP303</b> Core for BSc 20 credits	<b>FUTURE OF GAMES</b>  <b>GAM380</b> Core for BA 20 credits
	<b>OR</b>		<b>OR</b>

Game Development: Programming - GAM301 Experience Design  
 Computer Science - COMP301 Advanced Topics in Computer Science  
 Computing for Games - COMP305 Graphics & Simulation  
 Data Science - COMP370 Data Aesthetics  
 Immersive Computing - COMP306 Immersive Experience Design  
 Robotics - COMP304 Human-Robot Interaction



# Study Block One



# Modules

Everyone does the same three modules in study block one. These are:

- ▶ COMP101 Principles of Computing
- ▶ GAM101 Development Principles
- ▶ GAM102 Digital Creativity

Numeracy is part of several modules in this first stage of the course, but the BA(Hons) course will not continue this into the second stage. We only recommend making the switch if you do **not** feel comfortable with mathematics by the end of the year.

# Modules

There are more detailed module introductions, module welcome talks, module induction talks, and assignment briefs available for you to review on the LearningSpace.

These should be available to you next week, if they aren't available already.

We will briefly introduce these modules now, but you will need to review further details on LearningSpace.

# COMP101 Principles of Computing

**Aim:** To help you solve practical problems using basic computing and mathematical theory.

**Module Leader:** Associate Professor Ed Powley

On this module, you will learn the principles of computing, discrete mathematics, statistics, and technical communication (e.g., notation, pseudocode, unified modelling language, etc.). You begin to use core concepts and methods from computer science to solve practical problems and leverage algorithms in your solutions. Particular attention will be drawn to the history of computing, referencing the plurality of voices in the profession and the controversies evoked by algorithmic bias. A series of worksheet tasks will acquaint you with the techniques and methods in a practical way, enabling you to responsibly design, build, and annotate computing solutions.

**Assignment:** Worksheet Tasks

# GAM101 Development Foundations

**Aim:** To get you to practice the foundational collaborative skills required for the successful delivery of digital products and services.

**Module Leader:** Brian McDonald

On this module, you will gain foundational experience of developing digital products and services in teams. You attain this practically through several small-scale projects following various prototyping and pitching methods. You will work to develop a studio culture that strives to uphold professional values such as integrity, inclusivity, respect, and generosity. You will also apply Agile management techniques to facilitate a healthy approach to scoping and time management to promote positive teamwork. All the while, reflective exercises will help you recognise key professional attributes.

**Assignment:** Development Projects with Pitches

# GAM102 Digital Creativity

**Aim:** To get you feeling more comfortable using digital tools and techniques in creative contexts.

**Module Leader:** Associate Professor Michael Scott

On this module, you will learn different ways of engaging with digital creativity through a practical exploration of digital media formats including text, image, and sound. You will play, tinker, experiment with, and extend digital artefacts. You will then integrate your digital artefacts with digital game technologies, notably game engines, to make them interactive in some way. In doing so, you will embrace the principles of rapid iteration and of how to use versioning systems. However, appropriating third-party materials raises moral and legal questions that you will consider and frame within topics such as plagiarism, intellectual property law, licensing rights, representation and media literacy, as well as the maker and open-source movements.

**Assignment:** In-Engine Diorama

# Timetable



# Timetable

The timetable can be found on:

<http://mytimetable.falmouth.ac.uk>

Check the timetable every day! Sessions can, and often do change. Once you are allocated into groups for your collaborative game development projects, meeting times with tutors will change and extra sessions may appear!

The course isn't just the time you're scheduled to be with a tutor, you are expected to engage in self-directed study.

# Blended Learning

Many areas of our provision have improved due to online delivery methods. These include:

- ▶ Tutor meetings in GAM102
- ▶ Mathematics lectures and support in COMP201
- ▶ R&D support and dissertation supervision in COMP302 and COMP303

Since module ratings improved year-on-year for these modules, we will continue to use and enhance online delivery methods where they make sense and where they assure continuity in the student journey and a high quality of provision.

# Blended Learning

Many areas of our provision benefit from traditional delivery methods. These include:

- ▶ Workshops in COMP101 and GAM102
- ▶ Studio practice in GAM190 and other group project modules
- ▶ Using specialist equipment in robotics, immersive computing, etc.

These are studio-based courses and you are expected to convene with members of your team in-person in the studio as timetabled.

# Assignments



# Assignment Structure

**100% Coursework**

# Assignment Structure

Assessments are designed to reflect professional practice:

- ▶ Items for your Portfolio
- ▶ Collaborative Projects
- ▶ Pitches
- ▶ Papers

Relative importance of each will depend on your career trajectory



**Collaborative Approach with  
Arts Students**



Follows an **Incubation Model:**  
Make It For Real



Access to Excellent  
Studio Facilities



**Industry Involvement:** Show-off  
your work to professionals at our  
expo

290



E.V.



WRENCH

# Assignments

## Live Demo

All assignment briefs will be found on:

[learningspace.falmouth.ac.uk](http://learningspace.falmouth.ac.uk)

Enjoy freshers week now — read them very carefully next week!

LearningSpace is also where you submit **ALL** final “summative” versions of your assigned coursework tasks! We use git repositories to manage the large size of digital projects.

# Assignments

You will usually submit your work as:

- ▶ a link to your git repository
- ▶ or a single .pdf file

Please use the following convention:

**module-assignmentNumber-studentID**

For example:

**comp101-1-2011213**

We use anonymous marking where possible.

# Assignments

All assignment deadlines can be found on:

[myfalmouth.falmouth.ac.uk](http://myfalmouth.falmouth.ac.uk)

Take note of these carefully! A single second late, and your work will be capped at the minimum passing grade.

# Assignments

In the absence of extenuating circumstances (i.e., you are seriously ill and stuck in hospital):

**You MUST submit something  
for EVERY assigned coursework task!**

In the eyes of university policy, not submitting anything is usually unrecoverable. Even if your work is unfinished, please submit something! Even submitting a blank piece of paper is better than not submitting anything!

If you forget to submit, there is a grace period of 5 working days after the deadline. There is an EC policy which you can use to remove late submission penalties.

# Extenuating Circumstances

There is an extenuating circumstances policy which can be used to grant long or short extenions:

[https://www.falmouth.ac.uk/sites/default/files/media/downloads/Extenuating%20Circumstances%20Policy%20from%2019%20September%202022\\_0.pdf](https://www.falmouth.ac.uk/sites/default/files/media/downloads/Extenuating%20Circumstances%20Policy%20from%2019%20September%202022_0.pdf)

Academic staff do not have any say over whether ECs are granted or refused! These are determined by an impartial team based on the evidence you submit.

Make contact with a student advisor if you need help with ECs.

# Retrieval

If you fail an assignment, you get a second attempt. And, usually, a third attempt.

The second attempt is usually a **synoptic** assessment that takes place over the summer months, and will usually be a new assignment that is different to the originally set brief.

Third attempts are discretionary, and are usually 'trailed' into the next stage of study.

# Expectations in Higher Education



# Exercise

Go to:

<https://padlet.com/michaelscott5/xjdz7hngsnvyx35z>

Let's discuss what 'expectations' means, with particular focus on how they differ between higher and compulsory education.

- ▶ **List** key differences between expectations in the higher education and compulsory education contexts;
- ▶ **Suggest** what will be expected of you during your time on the course;
- ▶ **Give** examples of activities that count as 'self-directed study'.

# Expectations

Please note the following:

- ▶ This is a full-time course
- ▶ You are expected to do 1200 hours of study per academic year
- ▶ Approximately 1/3 of that will be contact time
- ▶ Approximately 2/3 of that will be 'self-directed study'
- ▶ This is a full-time course—you are expected to study **40 hours per week, EACH week**, for **15 weeks** across **EACH** study block
- ▶ By virtue of enrolling you have made a commitment to make this time available to study—your engagement with your studies is monitored

# Expectation

Typically, this coming study block has the following structure:

- ▶ 1 Week - Induction
- ▶ 5 Weeks - Study Weeks
- ▶ 1 Week - Reading Week
  - ▶ **NOT** a vacation
- ▶ 6 Weeks - Study Weeks
- ▶ 3 Weeks - Winter Vacation
- ▶ 3 Weeks - Study Weeks
  - ▶ **NOT** a vacation

Term dates: [https://www.falmouth.ac.uk/  
experience/term-dates/term-dates-2022-23](https://www.falmouth.ac.uk/experience/term-dates/term-dates-2022-23)



# Staff Support

You will receive support from staff during your timetabled sessions. However, if you require further assistance, for programming contact your programming tutor in the first instance, and for other academic queries, contact the relevant module leader. However, please be aware that educating you is only one part of our roles. We also do:

- ▶ Research
- ▶ Scholarship
- ▶ Knowledge-Exchange
- ▶ Public Service and Outreach
- ▶ Consultation
- ▶ Pastoral Care
- ▶ Administration
- ▶ External examining

Arrange ad-hoc support via email or Teams. We are not an on-demand service, but are happy to host you at our mutual convenience.

# Later: Robot Olympics

Later this week we will hold the Programming Olympiad next week — they're fun low-stakes activities.

Look at COMP101 for preparation.

Your programming tutor will introduce you to your team at the start of the event. Please be mutually respectful — you will be meeting with these peers regularly across the study block.

# Next: DoIT Profiler

There are many individual learning differences and neurodiversity in our community. You may familiarise yourself with these here:

[https://studyhub.fxplus.ac.uk/  
accessibility-inclusion/free](https://studyhub.fxplus.ac.uk/accessibility-inclusion/free)

In the next session, you'll complete the following activity to explore some of your individual learning differences:

<https://doitprofiler.net/Account/ClientLogin>

Client code: fall15mar

# Questions & Answers

Thank you for listening.

Please feel welcome to ask questions or raise concerns.