



# UNIVERSITY of ABERTAY DUNDEE

## Higher Education Achievement Report (Diploma Supplement)

Name: Mateusz Zaremba

Final Award: Computer Game Applications Development

Award Class: Bachelor Of Science in Computer Game Applications Development - Merit

GPA: 2.83

Award date: 12 June 2018

This Higher Education Achievement Report incorporates the model developed by the European Commission, Council of Europe and UNESCO/CEPES for the Diploma Supplement.

The purpose of the Supplement is to provide sufficient recognition of qualifications (diplomas, degrees, certificates etc). It is designed to provide a description of the nature, level, context and status of the studies that were pursued and successfully completed by the individual named on the original qualifications to which this Supplement is appended. It should be free from any value judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.

University of Abertay Dundee only produces HEARs in a digital format. Only HEARs accessed via [www.gradintel.com](http://www.gradintel.com) can be considered valid and verified.

### 1. Information identifying the holder of the qualification

- 1.1 Family name:** Zaremba
- 1.2 Given names:** Mateusz
- 1.3 Date of birth (day/month/year):** 3 September 1991
- 1.4 Student identification number:** 1502616
- HESA identification number:** 1510955026167
- HUSID (HESA Unique Student Identifier) is the unique national identifying number for students registered at a UK university. It is defined by HESA, the UK's Higher Education Statistics Agency.*

### 2. Information identifying the qualification

- 2.1 Name of qualification and (if applicable) title conferred:** Computer Game Applications Development  
The power to award degrees is regulated by law in the UK.
- 2.2 Main field(s) of study for the qualification:** Computer Game Applications Development
- 2.3 Name and status of awarding institution:** The University of Abertay Dundee, usually known as Abertay University, established by an Order of Council in 1994. Originally founded in 1888 as Dundee Technical Institute, later Dundee College/Institute of Technology.
- 2.4 Name and status of institution (if different from 2.3) administering studies:** As awarding institution
- 2.5 Language(s) of instruction and examination:** English

### 3. Information on the level of the qualification

- 3.1 HESA level of qualification:** Degree
- 3.2 Official length of programme:** 4 years or PT equivalent
- 3.3 Access requirement(s):**  
SQA passes in 5 subjects to include 3 at Higher Grade or equivalent and Standard English and Mathematics Credit Level 3 or better. A minimum score of IELTS 5.5 or equivalent is required for speakers of English as a second or other language.

### 4. Information on the contents and results gained

#### 4.1 Mode of study:

##### Year Mode of Study

2015/6	Full-Time
2016/7	Full-Time
2017/8	Full-Time

#### 4.2 Programme requirements:

##### Minimum Standards

An Honours Degree is normally obtained after four years of full-time study or part time equivalent. 480 credits (240 ECTS) at SCQF Levels 7, 8, 9 and 10 with a minimum of 90 credits being at SCQF Level 10.

##### Educational Aims of the Programme

Graduates have developed skills in real-time interactive graphics programming using industry standard game engines and application programming interfaces. They have an excellent grounding in programming techniques required by the computer games industry and elsewhere. During the course they have worked closely with games companies through project work and have worked closely with other highly-respected games courses within the University.

##### Regulations

The power to award degrees is regulated by law in the UK.

#### 4.3 Programme details, and the individual grades/marks/credits obtained:

**Programme start date** 7 September 2015

**Programme end date** 11 May 2018

Session	Module Code	Title	Level	Grade Point	Grade	SCQF Credits	ECTS Credits	Result
2015/6	AG0700A15	Computer and Graphics Architectures	07	4.00	A	15	7.5	Pass
2015/6	AG0701A15	Programming in C++	07	4.00	A	30	15.0	Pass
2015/6	AG0750A15	Narrative Theory in Interactive Game Design	07	2.50	C+	15	7.5	Pass
2015/6	AG0771A15	Mathematics for Applications Development 1	07	4.50	A+	15	7.5	Pass
2015/6	AG0791A15	Asset Production for Games	07	3.50	B+	30	15.0	Pass
2015/6	EL0802A15	Games for Change	08	3.00	B	15	7.5	Pass
2016/7	CMP201	Data Structures and Algorithms 1	08	4.00	A	20	10.0	Pass
2016/7	CMP202	Data Structures and Algorithms 2	08	4.50	A+	20	10.0	Pass
2016/7	CMP203	Graphics Programming	08	4.00	A	20	10.0	Pass

2016/7	CMP208	Game Programming and System Architectures	08	4.00	A	20	10.0	Pass
2016/7	ELE012	Film and Game Genres	08	4.00	A	20	10.0	Pass
2016/7	MAT202	Mathematics for Application Development 2	08	4.50	A+	20	10.0	Pass
2017/8	CMP301	Graphics Programming with Shaders	09	2.50	C+	20	10.0	Pass
2017/8	CMP302	Gameplay Mechanics Development	09	2.50	C+	20	10.0	Pass
2017/8	CMP303	Network Systems for Game Development	09	4.00	A	20	10.0	Pass
2017/8	CMP304	Artificial Intelligence	09	3.00	B	20	10.0	Pass
2017/8	DES301	Professional Project: Planning and Prototyping	09	2.50	C+	20	10.0	Pass
2017/8	DES302	Professional Project: Development and Delivery	09	2.50	C+	20	10.0	Pass

### Credits Obtained

Level	Credits	ECTS Credits
SCQF 07	105	52.5
SCQF 08	135	67.5
SCQF 09	120	60.0

#### 4.4 Grading scheme and, if available, grade distribution guidance:

##### University Grading Scheme and Explanatory Notes

Credit – the Scottish Qualification Framework SCQF (formerly SCOTCAT) credit awarded for passing a module. e.g. an honours level module is awarded credit at SCQF Level 10.

In order to obtain an honours degree a student needs to obtain 480 SCQF credits (normally 120 credits each at SCQF Levels 7,8,9 and 10).

1 SCQF credit is equivalent to 0.5 ECTS (European Credit Transfer System) credits.

For Honours Degrees made from 2016 onwards, a grade point average (GPA) of results from years 3 and 4 of the course was used to determine the classification of Honours. For awards made in 2015, no GPA was used and the classification was calculated using the previous academic regulations. In 2015 HEARs show GPA 0.00 to denote no GPA was calculated.

Further information about the Scottish Qualification Framework can be found at the end of your HEAR.

The calculated GPA corresponds to an honours classification as detailed below:

3.75 - 4.50 - 1st  
 2.75 - 3.74 - 2(i)  
 1.75 - 2.74 - 2(ii)  
 1.74 or lower - 3rd

For other non-honours awards at both undergraduate and postgraduate level, a student with an overall GPA of at least 3.75 will be awarded a distinction. A merit will be awarded where a GPA of at least 2.75 is achieved.

##### Module Grading Scheme (September 2014 onwards)

A+ 4.50 Excellent overall.  
 A 4.00 Excellent overall.  
 B+ 3.50 Very good overall.  
 B 3.00 Very good overall.  
 C+ 2.50 Good overall.

C 2.00 Good/ satisfactory overall.  
 D+1.50 Satisfactory overall.  
 D 1.00 Adequate.  
 MF 0.50 Marginal Fail  
 F 0.00 Fail.  
 NS No assessments submitted.  
 IN Assessment Incomplete due to valid mitigating circumstances.  
 NC Module not completed (e.g. due to withdrawal or temporary suspension of studies)

#### Module Results

Pass - Module Passed / Credit Awarded  
 Fail - Module Failed / Credit Not Awarded  
 Defer - Module Assessment Not Yet Completed

#### Module Grading Scheme Prior to September 2014

Grade A - (Excellent) - Outstanding performance – an excellent grasp of the subject matter.  
 Grade B - (Very Good) - A very good grasp of the subject matter.  
 Grade C - (Good) - Generally sound grasp of the subject matter, exceeds threshold standard.  
 Grade D - (Satisfactory) - A satisfactory performance overall, but limited grasp of some areas of the subject matter.  
 Grade MF - (Marginal Fail) - Performance just below the threshold standard.  
 Grade CF - (Clear Fail) - Performance well below the threshold level.  
 Grade LA - (Little Evidence of Achievement) - Little evidence of achievement of the learning outcomes.  
 Grade NS - (No Submission) - No assessments submitted.  
 Grade IN - (Incomplete) – Assessment incomplete due to valid mitigating circumstances

- 4.5 Overall classification of the qualification (in original language):** Bachelor Of Science in Computer Game Applications Development - Merit GPA: 2.83


## 5. Information on the function of the qualification

- 5.1 Access to further study:**  
 Access to postgraduate study, normally with second class honours and above.
- 5.2 Professional status (if applicable):**  
 The Programme is accredited by Creative Skillset

## 6. Additional information

- 6.1 Additional information:**
- 6.2 Further information sources:**  
 Further information about the HEAR is available from the university's web site  
[www.abertay.ac.uk/courses/hear/](http://www.abertay.ac.uk/courses/hear/)

## 7. Certification of the HEAR

- 7.1 Date of award:** 12 June 2018
- 7.2 Signature:**   
Susan Campbell
- 7.3 Capacity:** Academic Registrar
- 7.4 Official stamp or seal:**



## 8. Information on the National Higher Education System

### Description of Higher Education in Scotland<sup>1</sup>

#### Introduction

Scotland's distinctive higher education system has 20 higher education institutions (HEIs). The 14 universities, the Open University in Scotland, 2 colleges of higher education, 2 art schools, and a conservatoire are part-funded for research, teaching and learning through the Scottish Funding Council (see <http://www.sfc.ac.uk>). The HEIs are independent, self-governing bodies, active in teaching research and scholarship. They decide the Degrees they offer; the conditions on which they are awarded and the admissions arrangements. Degrees and other higher education qualifications are legally owned by the awarding institution, not by the state. The HEIs offer qualifications at undergraduate (Bologna first cycle) and postgraduate (Bologna second and third cycle) levels. In Scotland, the law distinguishes the power to award degrees on the basis of completion of taught programmes from the power to award Research Degrees. Universities have powers to award taught and research Degrees. Some other HEIs have powers to award Degrees while others offer programmes leading to Degrees awarded by HEIs with Degree awarding powers.

Lists of institutions with powers to award degrees and institutions recognised by authorities in Scotland as being able to offer courses leading to a Degree of another HEI may be found at: [www.universities-scotland.ac.uk](http://www.universities-scotland.ac.uk).

A small number of Degrees are available in colleges of further education by the authority of a duly empowered HEI.

#### Qualifications

The types of qualifications awarded at undergraduate (first cycle) and postgraduate level (second and third cycles) in Scotland are described in 'The Framework for qualifications of higher education institutions in Scotland' which includes qualifications descriptors, developed with the higher education sector (see [www.qaa.ac.uk](http://www.qaa.ac.uk)). The Framework was self-certified as compatible with the Framework for Qualifications of the European Higher Education Area, the qualifications framework adopted as part of the Bologna Process, in October 2006. The Framework is also an integral part of a wider national framework: the Scottish Credit and Qualifications Framework that covers all forms of programmes and qualifications from school to doctorates (see Table 1 and [www.scqf.org.uk](http://www.scqf.org.uk)).

Institutions use SCQF levels and credit points for students entering or transferring between programmes or institutions, and use ECTS for transfers within the European area.

<sup>1</sup>Scotland has a distinctive higher education system and also operates under a devolved government, including for higher education. There is a separate Description of Higher Education in England, Wales and Northern Ireland where the system is different to that of Scotland.

#### Admissions

Requirements for particular programmes are set by the HEIs which offer a range of routes for entry and/or credit transfer into their programmes, and admit students whom they believe have the potential to complete their programmes successfully. The Open University is an open entry institution.

The most common qualification for entry to higher education is the Higher or Advanced Higher or, for entrants from the rest of the UK, the General Certificate of Education at 'Advanced' level (including the "advanced supplementary") or comparable qualifications. Four or five Highers are normally taken in the 5th and 6th year of secondary school or at a college of further education and studied in considerable depth, involving coursework and final examinations. Advanced Highers are taken in the 6th year. A major route into Degrees, often with transfer of credit, is from Higher National Qualifications offered in colleges of further education.

#### Quality Assurance

Standards of qualification and the quality of the student learning experience are maintained by the HEIs using a range of processes including extensive use of external examiners. In some subject areas, Professional and Statutory Bodies have a role to ensure that programmes meet the needs and standards of the particular profession.

HEIs in Scotland demonstrate their public accountability for quality and standards through a national quality assurance framework that has a strong focus on enhancement as follows:

HEIs take account of a QAA published U.K.-wide code of practice for quality assurance, and U.K. subject level 'benchmark statements' on standards (see [www.qaa.ac.uk](http://www.qaa.ac.uk)).

Subject level issues are addressed by HEIs internal reviews conducted in accordance with guidance issued by the Scottish Funding Council (see [www.sfc.ac.uk](http://www.sfc.ac.uk)).

External reviews are conducted by the Quality Assurance Agency for Higher Education in Scotland (QAA Scotland). The Agency is an independent body established to provide public confidence in the quality and standards of higher education. It involves students in its quality enhancement activities. The Agency publishes reports on the outcomes of reviews and the confidence that can be placed in the HEIs' arrangements for assuring and enhancing standards and quality, and for ensuring that they provide public information that is complete, accurate and fair (see [www.qaa.ac.uk](http://www.qaa.ac.uk)).

A national development service supports students in their role as active participants in assuring and enhancing quality and standards (see [www.sparqs.org.uk](http://www.sparqs.org.uk)).

This national description is endorsed by the Quality Working Group which is a national committee with members from The Quality Assurance Agency for Higher Education, Scotland; The Scottish Funding Council; Universities Scotland and the National Union of Students in Scotland.

## Description of Higher Education in Scotland<sup>1</sup>

TABLE 1

### The Scottish Credit and Qualifications Framework (SCQF)

The SCQF covers all the major qualifications in Scotland from school to Doctorate and including work-based Scottish Vocational Qualifications (SVQs)

SCQF Level	Qualifications of Higher Education Institutions	SQA Higher National and National Units, Courses and Group Awards	SVQs
12	Doctoral Degrees (Minimum 540 SCQF credits)		
11	Masters Degrees (Minimum 180 SCQF credits) Postgraduate Diploma Minimum 120 SCQF credits)		SVQ 5
10	Bachelors Degree with Honours (Minimum 480 SCQF credits) Graduate Diplomas and Certificates		
9	Bachelors Degree (Minimum 360 SCQF credits) Graduate Diplomas and Certificates		
8	Diploma of Higher Education (Minimum 240 SCQF credits)	Higher National Diploma	SVQ 4
7	Certificate of Higher Education (Minimum 120 SCQF credits)	Advanced Higher Higher National Certificate	
6		Higher	SVQ 3
5		Intermediate 2 Credit Standard Grade	SVQ 2
4		Intermediate 1 General Standard Grade	SVQ 1
3		Access 3 Foundation Standard Grade	
2		Access 2	
1		Access 1	

### Notes

- 1 SCQF levels represent increasing complexity and demand in learning outcome.
- 2 One credit represents the outcomes achievable by the average student through 10 notional hours of learner effort. In general terms, one full-time undergraduate year is considered to be 120 credits worth of learning. A postgraduate year is 180 credits. 1 ECTS credit is deemed equivalent to 2 SCQF credits. Research degrees - Master of Philosophy (MPhil) and Doctor of Philosophy (PhD) are not credit rated.
- 3 Graduate Certificates (minimum of 60 SCQF credits) and Graduate Diplomas (minimum of 120 credits) are offered at levels 9 and 10 within the SCQF framework. They are offered for programmes that are for graduates but do not have outcomes that are at postgraduate level.
- 4 The Bachelors Degree (level 9) leads to employment and in some instances can give access to postgraduate study particularly when accompanied by relevant work or professional experience.
- 5 At postgraduate levels, the framework and the higher education qualifications are the same as those for the rest of the UK. The Honours Degree levels of the two frameworks are considered to be in broad alignment (the Honours Degree in Scotland normally takes 4 years and that in the rest of the UK takes 3 years). Below Honours level the frameworks reflect the different educational structures of Scotland and the rest of the UK).

This national description is endorsed by the Quality Working Group which is a national committee with members from The Quality Assurance Agency for Higher Education, Scotland; The Scottish Funding Council; Universities Scotland and the National Union of Students in Scotland.