

Mobile App Development

MSc

```
am].x;  
am].y;  
oszam].cim;  
s(x,y,kepszam);  
kol_minta(x,y,kepszam,xh,yh :longint);  
: cardinal;  
: cardinal; {!!! Ezt kéne optimalizálni, de valamikor :) }  
am].x;  
am].y;  
to (yh div yy)-1 do  
xx then  
in  
or oszlop:=0 to (xh div xx)-1 do  
kepkirajzol(x+oszlop*xx,y+sor*yy,kepszam);  
epkirajzol_reszlet(x+oszlop*xx+xx,y+sor*yy,kepszam,0,0,xh mod xx,yy)loop @ujpixel  
kirajzol_reszlet(x,y+sor*yy,kepszam,0,0,xh,yy);  
end;  
procedure atalakit8_16(kepszam,0,0,xx,yh mod yy);  
asm  
push es;  
mov ax,xh; mod yy);  
mov es,ax  
mov edi,kepcim  
mov esi,keptemp  
lea edx,keppal  
mov ecx,hossz  
@ujpixel: xor ebx,ebx  
lodsb  
xchg esi,ebx  
push esi  
mov ebx,edx  
shl ebx,1  
dd es;  
odsw  
mov bx,edx  
lodsb  
xchg b
```

The Guardian
TOP 50
University Guide 2015

College of Engineering and Technology



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Essential Information

Location

Derby campus, Kedleston Road

Duration

One year full time or three years part time

Start dates

September and January

Entry requirements

An appropriate honours degree (at least 2.2) or equivalent qualifications/experience in a computing discipline.

Entry requirements for EU/International students

As above (or the international equivalent qualification). If English is not your first language then you will need to hold IELTS 6.5.

Suitable for applicants from



Mobile App Development

MSc

The course aims to

- Develop your knowledge and techniques to produce commercially viable and innovative mobile applications that can be downloaded worldwide.
- Prepare you for a rewarding career in software development or to launch your own company producing mobile applications.
- Give you vital insights into how mobile software can be harnessed by businesses to improve their productivity and performance.

About the course

Mobile devices are now used worldwide – due mainly to the vast range of software that makes portable devices essential accessories in the information age.

It's a trend which has seen a growing demand for professionals who not only understand the design and development of mobile software apps, but also appreciate how they can be integrated into business environments to achieve competitive advantage and operational efficiency.

To meet this demand, our MSc delivers in-depth knowledge of techniques; technologies and tools; latest standards of mobile software development; and interface design and integration. It also focuses on the exploitation of mobile devices in corporate and commercial networks and in particular their role in emerging network architectures.

You'll cover iOS and Android development, interface design principles, emerging computer network architectures, and security. You'll also have the opportunity to research exciting areas of mobile technologies, tools and techniques and to disseminate your own findings and developments.

The course culminates in a development project incorporating what you have learned during your studies. Focusing on your chosen specialisation of mobile software design, development, entrepreneurship or distribution, the project will give you

a challenging opportunity to produce innovative software.

Having decided on the theme, you will produce a masters level project with the support of your supervisor who will provide you with all the academic advice you need. You will study in our computing suite which is equipped with both Apple MacBook Pros and PCs to industry standard.

Course content

This course is made up of three stages – Postgraduate Certificate, Postgraduate Diploma and MSc.

Postgraduate Certificate and Postgraduate Diploma

You'll study three modules to achieve the Postgraduate Certificate and a further three to achieve the Postgraduate Diploma:

Studying at Masters Level and Research Methods

This module will develop your ability to study at masters level and help you to develop, plan and execute a research project.

Emerging Architectures and Security

Advances in technology, coupled with the pervasive nature of computing, mean that the architecture of an information technology system often needs to react and change as new ways of using the architecture emerge. Many applications depend on network programming. During this module, you'll cover the methodologies and approaches used to develop network-based software and evaluate it critically with a specific focus on real world security aspects.

Entrepreneurial Management

There is currently a shift from notions of the individual entrepreneur towards the study and practice of entrepreneurship as a form of transformational management. This module will help you learn more about this shift and how entrepreneurial approaches are used to create new sources of value. A key focus is on applying innovative business models to connect opportunities with the resources needed to exploit them.

Essential Information

How To Apply

www.derby.ac.uk/applyonline

Fees for UK/EU students

2014/2015 fees were £755 per 20 credit module. You'll study the equivalent of nine 20 credit modules in total. Please see our website for the latest information.

Fees for International students

2014/2015 fees were £11,260 per year. Please see our website for the latest information.

Contact us

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Mobile and Client-Side User Experience

Mobile devices are now a part of modern western life but there are many challenges in designing a highly effective and engaging mobile user experience. You'll explore these challenges during this module, which is based on developing sound knowledge of user-centred design methods and human computer interaction (HCI) principles, along with their application to the browser and mobile user experience. You'll also investigate the concepts and technologies involved in the design and implementation of cross-platform client-side scripting for web pages that run on mobile devices.

Mobile Software Design and Architecture

You will examine the design, development and architecture of mobile applications for a variety of platforms, focusing on open-source technologies. This will include using tools for creating native applications for the platforms, as well as tools for cross-platform development.

Mobile Software Development

This module builds upon the knowledge of user interface design and the closed and open platform development skills gained in other modules to review and compare the differences between the available closed platform development options (Android, iOS, and Windows Mobile). A mobile application is developed using software engineering best practices to act as a case study for this analysis and to introduce you to the Objective-C and Swift languages for iOS development. Finally the application is redeveloped under a cross-platform medium to effectively demonstrate the differences and overheads that arise when dealing with a coding platform which is not optimised for individual devices.

MSc

You'll study this module:

Independent Scholarship

This triple module enables you to integrate the knowledge you've gained throughout the degree to formulate, research and resolve a real-world, commercial IT problem. You'll present your findings and solution in the form of a dissertation.

Similar courses:

- MSc Information Technology
- MSc Cyber Security
- MSc Advanced Computer Networks





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