

# **COURSE JOINING INFORMATION**



**BSC (HONS) COMPUTER SCIENCE**

**CARDIFF SCHOOL OF  
TECHNOLOGIES**

**Induction & Enrolment Information**

**Academic Year 2020/2021**

**CardiffMet**

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## 1. Welcome from your Teaching Team

A very big welcome to Cardiff Metropolitan University (Cardiff Met) and the Cardiff School of Technologies (CST). We are so pleased that you have chosen to spend the next few years studying with us and we are confident that you will have an enjoyable and fulfilling experience.

The whole teaching team are on hand to help you get the most out of your time at Cardiff Met. Please do not hesitate to contact us if you have any questions or concerns in the coming weeks, as you settle into your new life at the University. We would also like to emphasise that everyone at CST and Cardiff Met are taking every possible precaution to ensure that you enter a COVID-19 safe learning environment. We are customising all our teaching and learning methods, resources, and lab spaces to ensure that you can carry out your studies, projects, and learning activities without any hindrances.

As a new student at Cardiff Met you will be assigned a Personal Tutor who will provide support throughout your time here. In addition, your Programme Director (or “PD”) will not only be an additional point of contact for support but will also be responsible for the academic and administrative coordination of the course.

This welcome pack has been written to help you get off the starting blocks and to let you know a little bit about your first week at the University. We have also put together a summer project with few activities which you can engage and attempt at your own pace. We hope that this will give you an insight into the course, as well as inspire and motivate your enthusiasm to succeed as a Business Information Systems student.

During the induction week, you will have the opportunity to meet your lecturers, fellow students and learn more about Cardiff Met and the city. We hope you find the week fulfilling and enjoyable.

We look forward to meeting you soon!

Yours Sincerely,

Thanuja Mallikarachchi  
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## WELCOME FROM THE DEAN OF CARDIFF SCHOOL OF TECHNOLOGIES



It is with great delight that I write to welcome you to this, the start of the next phase of your journey, at an exciting time in the life of this relatively new school at Cardiff Met.

I suspect you may be experiencing a range of feelings. After your years of diligence and dedication to achieving your goals you have now, deservedly, been offered a place at Cardiff Met. You are quite possibly feeling a little trepidation coupled with excitement and maybe even some fear. All these feelings are entirely natural. Be under no illusion that you have both earned and deserve your place at Cardiff Met and you will thrive whilst being a member of the university community. Well done and congratulations for taking this next step!

Within the School of Technologies it is our aim to spend the next few years preparing you for successful careers in a range of sectors based on the skills you will learn with us. In addition to the obvious technical skills and knowledge, and particularly for those of you joining us straight from schools or colleges, we will be developing your talents to enable you to smoothly transition into the workplace upon graduation.

We will help you develop your understanding of the required behaviours in any workplace. To do this we will be drawing on the whole School of Technologies community. Your studies will be complemented with guidance and coaching from the widely experienced staff body and may also draw on the experience of your fellow mature students. These are students undertaking the same programmes but who may have followed careers elsewhere before joining us.

I've mentioned the word community a number of times. You will be joining the School of Technologies community and we want you to look forward to it. The community will comprise people on the same journey, on other technology programmes, postgraduate students and researchers and staff. It is a very close community united in its desire to improve both itself and to provide a safe and secure development environment for all its members. All that is required of you is that you engage and enjoy the opportunity whilst here.

Welcome to the Cardiff School of Technologies community – we look forward to meeting you.

Yours Sincerely,  
Jon Platts

BEng MSc PhD CEng FIET MInstMC MINCOSE  
Dean of Cardiff School of Technologies  
Professor of Autonomous Systems



## 2. Pre-Entry Summer Tasks

The set of activities listed below are prepared to inspire your enthusiasm, critical thinking and problem solving abilities; skills which are pivotal to succeed in the field of Electronic & Computer Systems Engineering. The attempting order of the activities, composition of activities, programming languages to be used, and progression towards the completion is entirely up to you. You may engage with these activities at your own pace and you may refer to any additional resources if required.

### Activity 1: Learn basic programming skills

Computer programming is an essential element in this course, and you will be learning number of programming languages such as C/C++, Java and MATLAB etc. These will be used throughout the course either for high level application development, embedded system programming, and scientific programming. In this case, following books and freely available online courses will provide step-by-step guidance for you to learn basic programming skills using C, Python, and Java.

- [C Programming - Absolute Beginners Guide](#)
- [Codecademy: Python 2](#)
- [Codecademy: Basic Java](#)
- [Codecademy: C++](#)

### Activity 2.1: Basic machine learning – beginner level

Machine learning is an important aspect in your curriculum. You will encounter modules related to AI and computational thinking in your 2<sup>nd</sup> and 3<sup>rd</sup> year, respectively. In addition, it is a widely popular topic and a subject area as most of the recruiters and technology companies are looking for individuals with both practical and theoretical experience in machine learning and AI.

In this case, Weka, is an open source workbench for machine learning which you can use to explore, visualise, and build machine learning models without writing any code. In this task, you are requested to go through the following tutorial which gives basic step by step instructions on how to setup, and build simple machine learning projects using Weka. It is easy to follow, and the explanations in the tutorial are illustrated with real-world examples.

- [WEKA open source machine learning workbench](#)
- [WEKA tutorial](#)

### Activity 2.2: Basic machine learning – intermediate level

[Kaggle](#) is an online community of data scientists and machine learning engineers where you can find public datasets, academic discussions, industry trends and real-world problems that need innovative solutions. Kaggle's real-world data analysis and machine learning problems and public datasets are a great opportunity for students as well as professionals to learn the concepts of programming, data science and machine learning and win amazing prizes in the process.



Kaggle contains number of projects and competitions that are suitable for a range of skill levels and interests. As a beginner it might be worth looking into the following entry level competitions/projects.

- [Titanic: Machine learning from disaster](#)
- [Predicting house sales prices](#)

On the course, we will help you learn all about programming and problem solving, even if you've got no experience. Therefore, do not worry about the complexity of these problems at this stage. Go through the descriptions, explore the datasets provided, and you can also examine the solutions already provided by others. Kaggle also provides a range of additional tutorials on their website which might be useful to complete the tasks.

Furthermore, if you are keen in exploring deep concepts in data science and machine learning, we recommend going through **Scikit-Learn**, which is a popular machine learning library available for Python. It constitutes number of built-in machine learning algorithms, sample datasets and high-level APIs for constructing your machine learning model with few lines of codes. You can follow the [Scikit Learn Tutorials](#) as a starting point to learn basic machine learning techniques.

### **Activity 3: Simulate your robots**

Robotics, automation and autonomous technologies are some of the emerging technology trends and some of these elements are embedded within your computer science degree program. Use of simulation environments is a great way to try and test your algorithms and designs before deploying them in actual environments with physical hardware units. In this context, the following robotics simulation environments provide a great environment for you explore some of the robotics models, create and test simple programs and visualise the outcomes. All these platforms come with enriched tutorials, and community support that you can use to get started.

1. [ROS](#)
2. [Gazebo](#)
3. [RobotDK](#)

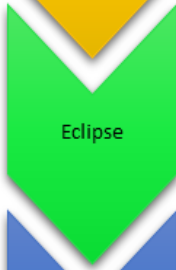
### **Programming Tools and platforms:**

As a student working towards a degree in Computer Science you will be encountering number of tools and platforms which will be used for designing, implementing and validating various software products and systems. Some of these are professional tools which you will potentially use once you enter the workforce as a professional. We will be assisting you in learning the usage of some of these tools during this course. However, it will be useful if you become familiar with some of them while attempting the aforementioned activities.

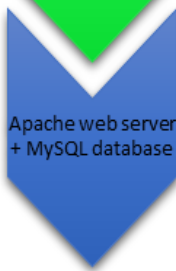




- An Integrated Development Environment(IDE) for professional Python developers and is compatible with both Windows and Linux platforms
- Pycharm can be easily integrated with **Conda**, which allows you to manage your workspaces, and packages with different Python versions



- A cross platform Integrated Development Environment (IDE) which is mostly used for programming in Java, C and C++.
- Eclipse can be easily integrated with **Git** to manage, share and collaborate your source code using a distributed version controlling system



- Apache web server is a cross platform open source web server that is used to develop, and test websites before deploying them into public servers
- MySQL is a widely popular open source database. Both components and PHP (which is a server-side scripting language) is available as a stack of software tools which can be installed together
- In this case **WAMP** server for windows, **LAMP** stack for Linux and **MAMP** for MacOS can be easily downloaded and configured.



### 3. Enrolment / Student MetCard Collection

Enrolment is an important process which confirms your status as a Student.

You can complete the online self-enrolment process from any computer through our Self Service system. Please note that in order to self-enrol; your status must be Unconditional Firm (UF).

You will receive an email notifying you when you are eligible to enrol online. The email will direct you to a password reset facility in order to request a password to be able to login and complete the enrolment process. For information and guidance on this process please make sure you visit our enrolment page – [www.cardiffmet.ac.uk/enrolment](http://www.cardiffmet.ac.uk/enrolment).

This process is essential in that it will allow you access to your student loan (if applied for), payment of fees, Cardiff Met's IT systems and importantly enable you to obtain your Student MetCard.

You will also receive your Programme Handbook during your Induction Week. The Programme Handbook is a vital manual through the Programme and should be retained for usage throughout your course of study. Each academic year, additional information relating to that level will be provided. The Handbook offers guidance on Rules, Regulations and Procedures; and guidance on learning for practice with information on all modules to be undertaken and reading lists.

#### **Enrolment for International Students from outside the EU**

If you are an international student (from outside the EU) you will be required to submit some documentation before receiving approval to enrol online. For more information about international student enrolment and a list of documents you will need to submit, please access the [international student pages](#) or contact the Immigration Compliance Team at [immigrationregs@cardiffmet.ac.uk](mailto:immigrationregs@cardiffmet.ac.uk).

#### **Library & Information Services**

You will have access to Cardiff Met's Library & Information Services soon after completing your online enrolment. A confirmation email will be sent to you with your Cardiff Met login details. To see the facilities and services available, please refer to [www.cardiffmet.ac.uk/library](http://www.cardiffmet.ac.uk/library).

#### **Your Student MetCard**

Your MetCard gives you access to all main campus buildings and doors. You can also add money to your MetCard to be able to access and pay at the self-service printers, copiers and Print Studio services. For further benefits of MetCard please click [here](#).

#### **Fees**

Tuition fees for full-time undergraduate degrees, and full-time Masters programmes for September 2020 entry have been set at £9,000 per year. For further information on tuition fees, please refer to our [Fee Tables](#). If your programme has any additional costs attached to it, they will be listed on [www.cardiffmet.ac.uk/additionalcosts](http://www.cardiffmet.ac.uk/additionalcosts). Please make sure you check these to make sure you are aware of any additional costs associated with your course.

Details about fees for international students (from outside the EU) can be found [here](#). You should already be aware of these costs.





#### 4. Induction Week

Induction for all students within the School of Technologies will commence on Monday 28<sup>th</sup> September 2020. Your first term as a new student starts with Induction Week, where you will settle into your accommodation, course and student life. Your Induction Week timetable is a schedule of events designed to familiarise you with Cardiff Met, its facilities and your fellow students. You will be given the chance to attend a range of events covering your programme, library services, IT, student services and Students Union. You will also meet, and have a number of sessions, with your personal tutor to make your academic transition as smooth as possible.

In line with the programme delivery information below, the Induction week will include activities that are both synchronous (delivered at a scheduled time and led by a member of staff) and asynchronous (activities designed and set by a member of staff but completed in your own time). These activities will largely happen in online/ virtual environment spread throughout the induction week; however, we are also planning activities to run on-campus where government restrictions allow.

Your events and confirmed timetable are currently being finalised and will be uploaded as a separate document on our [New Students](#) pages for you.

For those in Halls of Residence, don't forget to check out the programme offered through the [Residence Life Team](#).



## 5. Draft Timetable / Typical Attendance

As a first year student, you will have access to your confirmed timetable from Induction Week (w/c 28th September 2020), which is prior to the first week of teaching.

In Term 1, your modules will be delivered in a block, which means you will study one module over a 4 week period with assessments at the end of that period.

Each week you will have approximately 12 hours of contact time:

- 4 hours of delivery in Lecture/Studio;
- 4 hours of delivery in workshops;
- 4 hours of in peer-to-peer support in student huddles.



## 6. Changes to the Course due to COVID-19

Any updates to your course following the effects of COVID-19, can be found on the following webpage. Please make sure you check this page regularly for any further updates or changes, prior to starting your course;

<https://www.cardiffmet.ac.uk/study/newstudents/Pages/Programme-Updates.aspx>

Some of your induction is likely to be delivered online, sometimes using Microsoft Teams. We recommend that you download the app to your phone, or visit the website in a browser to familiarize yourself with how to use this platform.

If you do not have the facility at home to access this type of platform, or would have any difficulty in doing so, please let us know.

<https://www.microsoft.com/en-gb/microsoft-365/microsoft-teams/group-chat-software>



## 7. Useful links

### [Timetable](#)

This link will give you access to your confirmed timetable. You need to have enrolled before you can access this link, and you will be contacted when the information is available.

### [Global Engagement](#)

Advice and support for international students from outside the EU on making your visa application, living in the UK, making accommodation arrangements and taking advantage of the Airport Welcome Service. Global Engagement will provide welfare support and learning advice throughout your course. Please also refer to our frequently asked questions -

[http://www.cardiffmet.ac.uk/international/study/Pages/September-2020-FAQs-\(COVID-19\).aspx](http://www.cardiffmet.ac.uk/international/study/Pages/September-2020-FAQs-(COVID-19).aspx)

### [Additional Course Costs](#)

Additional costs are the mandatory or optional expenses, additional to tuition fees that need to be paid for by students to fully participate and complete their studies. This covers such things as equipment, trips, placements and DBS checks. Each programme has different additional costs.

### [Accommodation](#)

Student residential contracts will start on 28<sup>th</sup> September 2020. However, due to social distancing and to ensure the health and safety of you and our staff, arrivals for halls will be spread over a number of days the week before. Once you have received and accepted your offer of accommodation please watch out for an e mail letting you know when you will be able to move in. Please note that internet access in halls will only be available for those who have completed the enrolment process successfully. There will be a variety of events held throughout the Induction period and throughout the 1<sup>st</sup> term, information of which will be sent to you by Accommodation when confirmed

### [Student Services](#)

For help during your time with us in relation to your health, welfare, lifestyle and future career. The aim is to provide you with all the support you need to ensure your studies are as enjoyable and successful as possible. Services also include counselling, disability and chaplaincy.

### [Student Finance](#)

For information on Tuition Fee Loans and Maintenance Loans, non-repayable grants, bursaries and scholarships that may be available.

### [Cardiff Met Sport & Facilities](#)

[Cardiff Met SU](#) including SU Societies, SU Sports Clubs and the ability to access independent advice and support

### [Term Dates](#)



### [Campus Maps, Bike Shelters & Met Rider](#)

Cardiff Met offers its own bus service called the Met Rider, for more information and to access the application please refer to [www.cardiffmet.ac.uk/MetRider](http://www.cardiffmet.ac.uk/MetRider). We also have Bicycle Storage shelters on each campus, with changing and showers available. The shelters are secured and are only accessed using your MetCard when you have requested permissions via the i-zone.

### [Virtual Tours](#)

Have another look around our campus and facilities with our guided virtual tours

### [Student Handbook](#)

### [Academic Handbook](#)

### [Admissions Policy](#)

### [Frequently Asked Questions](#)

### [Complaints](#)

