#### The Students' Review

Deciding to sign up for this or that class is always a hassle. More so, for students who are only starting out at CMU Africa. As with every life experience, we thought that we could benefit immensely from hearing students who have taken certain classes share their experiences with you.

This review is unofficial, and is only aimed at giving you an idea of what to expect. As it is heavily influenced by the backgrounds and capabilities of the reviewers, and regrettably does not cover all courses, please take the liberty to seek more perspectives by speaking to as many students as you can.

We wish you the best of luck in your first semester.

This is an initiative of the Academic & Research Ministry, in partnership with our Academic Adviser, Olga G. Buki.

# Fundamentals of Software Development and Problem Solving (PFUN)

I had a good experience with the course, the assignments helped me learn a lot, although I felt like the syllabus and method of delivery could be improved by adding more in class exercises and by covering additional topics such as multithreading and have more structured assignments and course projects suited to solve real life problems that could give a solid base for those interested in following a software engineering path.

Anonymous beaker

The lecturer was not as engaging and did not explain concepts clearly.

Just a student

The course is great for anyone who has little or no skills in programming, as it is designed to help student-learning programming and coding using java.

Common person

This course can provide a solid foundation in software development principles and problem-solving techniques. It may help students develop logical thinking, coding skills, and the ability to break down complex problems into manageable components.

Kigali Einstein

## Strategic Uses of Digital Information in Enterprise

This course can offer insights into leveraging digital information to drive strategic decision-making within organisations. It may cover topics such as data analysis, information management, and the use of technology to gain a competitive edge in business.

The bear

It is a very good and thoughtful course.

A top student

The grading system is very challenging so it is literally impossible to get A but if you work hard you can get an A-. However, you will learn a lot about the benefits of data for a business. The assignments are also interesting.

Master of strategy

#### DevOps: Software Development and IT Operations

Software Development and IT Operations: This course can equip students with knowledge and skills related to DevOps practices, emphasising collaboration, automation, and continuous delivery. It may help students understand how to streamline software development processes and improve efficiency in IT operations.

I forgot my name 🥲



The course is a great course for someone with little or no knowledge of how to write a yaml file and set up a CI/CD pipeline. The course never had a lot of real life examples as I expected. Prepare yourself to write as many guizzes as possible and participate in class to perform well in the course.

Never mind the name!

## Fundamentals of Telecommunications and Computer **Networks**

It was a great course, great lecturer and TAs. There was just a lot to do in a week.

A student who suffered

#### Internet of Things (IOT)

It helps to know about programming, some data communication terms, and electronics. But it is not required and can be learned during the course.

The internet's only child

The course was educational and introduces new technologies, takes a holistic approach by covering networking, signal processing, security and adds some maths. It was very practical with labs and projects. However, compared to other courses that give an assignment per week for instance, the IOT course gives assignments and labs separately and so students might have to submit homework and a separate lab at similar deadlines.

Hmmm, I suffered

It's very practical and you learn a lot. It requires a lot of dedication due to the projects involved. I enjoyed this course.

A+ student

#### Applications of Artificial Intelligence in Africa

The course is basically introducing students to different AI applications in Africa, you will be reading weekly papers and filling a form for summarising what you read in the paper.

Anonymous bear

Really a good course, that should be taken in the first semester. But If you're not used to paper readings and review, it can take you more than 6 hours.

A bot

Just make sure to give a lot of details while writing a summary of papers, then you're good :)

A student who survived

#### Introduction to Probabilistic Graphical Models

It is a good course for someone who is interested in AI not just machine learning

Poincaire himself

# Artificial Intelligence for Engineers

Good introductory AI course. Really learnt a lot from the readings. The concepts from this course helped me in other courses like Intro2ml and NLP.

Another top student

## **Programming for Data Analytics**

This course can provide programming skills specifically tailored for data analytics tasks. Students may learn how to work with data, apply statistical techniques, and use programming languages and tools commonly used in data analysis. This course may be beneficial for those interested in working with data-driven insights.

Anonymous beaker

A very interesting course with a very helpful professor.

A student who got an A

# AI & Emerging Economies (Grand Challenges in AI: Past, present and future)

The course is a mixture of lectures with many guest speakers (Professor Pentland, Professor Nakalambe ...). I have learned a lot from both lectures and invited guests. It gave me a chance to learn different perspectives on Al and their challenges along with interacting with experts on the field.

**KigaliGPT** 

#### Natural Language Processing

The course pushed me to my limits. There is a lot of reading to do, and the assignments are really time consuming. Also, as a Kigali student taking the class remotely, you may not feel as involved as you may like. However, this is also one the classes in which you will learn the most, so I will say it is worth it. Exams are open book, too!

A student who nearly died.

Do you want to build the next ChatGPT? This is the course to take. It is the most challenging course I faced at CMU so far. Also the course I have learnt the most. State-of-the-art course concepts are taught like large language models, machine translation and text-classification. Also, underpinning linguistic concepts are taught like discourses, context free grammars etc. The assignments, readings & projects take a lot of time. Make sure you have a good group. Just make sure you don't take other much demanding courses along with this one. Also be weary of the late class start time. But if you're interested in NLP, you shouldn't leave CMU without taking this.

Anonymous model-maker

My experience was terrible because the course was remote, I felt disconnected with the Pittsburgh campus but these issues were raised and the CMU-Africa administration has promised to fix the problems relating to students' learning experience.

You can't see me

#### Introduction to Information Security

The TAs did not understand anything so it was useless to try and get help from them.

I like problems!

#### **Power Electronics**

The course was delivered well. I enjoyed the class sessions and learned a lot from the final project/assignment. The final assignment can be demanding. Time management towards the end is crucial. Understanding and supportive professor.

Kigali Power Child

#### **Artificial Cognitive Systems**

The course is time consuming and it has a lot of exams.

Hmm, that's all I can say about myself

Very enjoyable course that gives some theoretical perspectives of cognitive systems and links to AI and robotics.

Definitely a top student

Prepare yourself to do a lot of reading.

The student walrus

Requires a lot of reading and being able to understand concepts. It's very comprehensive and requires dedication.

CMU's hippo

## Energy Project Development and Economic Studies

I enjoyed the project aspect of it. It is a mini and can be demanding towards the end of the course which is during midterms. A very understanding and supportive professor.

Anonymous child

#### Photovoltaic Systems Engineering

It was a packed course. Learned a lot from the assignments and final project. It can be demanding as it is the second mini course. The exam was challenging. The professor is understanding and very supportive.

Yet another top student

#### ICT in Africa Seminar

There are weekly papers and accompanying summaries to be submitted. There are also weekly presentations and a ton of group work. Overall, this is an excellent class for someone who wants to develop their critical thinking and presentation skills.

Incognitsanda

Great course!! The content helps in being more effective when it comes to problem solving using ICT, performing efficient written and spoken communication no matter the audience. PS: This course can without a doubt be recommended for all concentrations.

Anon

This course is all about reading ICT papers in Africa regarding connectivity, cybersecurity, AI, healthcare, human centred design, and others in the first half of the semester, and in the last half, there is a health care team project that solves one of the health care challenges Africa is facing. My experience is this course has planted a reading culture in me, finding useful information in a scientific paper. Also, I have improve my writing and presentation skills

Sleepless honcho

# ICT Entrepreneurship Seminar

Great course, excellent course outline and structure, great lecturer.

Cruise Mouse

This seminar can offer valuable insights into entrepreneurship in the ICT sector. It may cover topics such as identifying market opportunities, developing business plans, and understanding the unique challenges and opportunities in the ICT industry. This course may be of interest to individuals looking to start their own ICT-related ventures.

A money-minded students

#### **Advanced Database Systems**

The teacher is great and will challenge your understanding of database systems. However, you must be willing to read, as you may have random quizzes and the class is very theory oriented. Although it is theory oriented, I still liked it because it gives you all the knowledge that will make doing the practical aspects in the industry much easier.

Mr MongoDB

It wasn't challenging to me because I had working experience as a database admin. For someone with no experience, the course is very comprehensive and helpful.

A++ student

#### Augmented and Virtual Reality

It is a good introductory course to virtual reality and augmented reality requires giving some time to fully grasp the concepts.

Hardworker

The experience from this course is amazing. I got exposed to the development of virtual and augmented reality applications, 3D operation, rotation and translation in 3D and the last class that was done in a virtual way at campfire.

The engineer

#### Introduction to Deep Learning

The course was very interesting, very demanding but doable. It requires you to prepare well for the course as the course work is demanding. However, following course lectures, managing your time very well will be helpful. Above all, always start early, training models or solving bugs at the last minute will not always work.

A student who did not know Saturday

#### Introduction to Machine Learning for Engineers

It is a really good course to get a deeper understanding on fundamental machine learning models from scratch. It requires a lot of maths background and a bit of python programming.

We are legion

#### The Students' Review, Fall 2023 Classes

This course is highly commendable as it provides an excellent foundation in Machine Learning. This course gave me a comprehensive understanding of the fundamental principles underlying various Machine Learning models, starting from their conceptualization to their mathematical representations. Additionally, I acquired knowledge on optimising the performance of these models. Indeed, this course is essential for individuals aspiring to specialise in Applied Machine Learning. I highly recommend this course as it exemplifies excellence.

Kigali's Hinton

Great course... I wish the course did not end. It really made me get a solid algorithmic understanding of ML models. The instructors are super intelligent. Just ensure that you do the textbook readings all along the way and be very inquisitive. It is very much possible to get an A on this course! I wouldn't take this course without doing Stochastic Processes and Al 4 Engineers. The course is not just maths heavy, but also a good understanding of the ML Algorithms really helps.

Obviously a top student

The course was very interesting and gives a good back knowledge of how machine learning models works mathematically. It is mandatory for every MSEAI student (and I call it a must do for even MSIT and MSECE students that would love to concentrate on Applied Machine Learning). It is quite difficult for people without a mathematics background, so best taken either in your second semester or 2nd year. Learning in this course is fast-paced, because for every week you learn about a particular model or two. My advice is that do not go into the course with the mindset that it is very difficult, but give in to learning.

A data scientist

#### Data, Inference and Applied Machine Learning

The assignments are very lengthy and will require that you plan ahead. They are doable, though, and overall the course is very helpful for anyone who is new to the world of machine learning.

Soon to be a TA

The exam for the course is unpredictable.

A student who experienced a lot

#### The Students' Review, Fall 2023 Classes

I was already familiar with data science and this course was not hard for me.

Another top student

My experience in this course is that I got exposed to machine learning and how I can use data in decision making. Be careful about collaboration, there is a high chance to commit AIV. What I don't like about this course is that exams don't require knowledge acquired from it rather than memorization of some text from notes.

**Anonymous Mouse** 

I think the instructor was good at passing on his lessons but he was too strict with assignment submission such as naming files to submit, putting together all the files used, and submitting late if the software crashes.

11:59 Ninja

#### **Applied Stochastic Processes**

The course is interesting and difficult at the same time, and the professor is a nice person.

CMU's Schrödinger

Great course. Got solid foundations that helped me in other AI courses. I basically spent the whole time reading through the whole textbook twice during the course and I was fine. It starts from basic probability, to random vectors, markov models, stochastic processes that helped me alot.

An Engineer

I don't come from a strong mathematical background, but I made sure to put in the effort while taking the course, and in the end, I passed with good grades. Despite the fact that the course has a midterm and final exam and it might look intimidating at first, it is definitely doable!

An improved student

#### Privacy, Policy, Law & Tech

I thoroughly enjoyed this course as it allowed me to dive into a completely new industry in tech that I didn't know existed. Privacy and Policy, and its interconnection with the devices and software we build and use. This course will help you understand the numerous pop up

#### The Students' Review, Fall 2023 Classes

notifications you receive on your phone and the popular "Privacy Policy" agreement of all these companies we agree to. Enjoy the ride! It only gets interesting!

I can be your lawyer