About this Course

Artificial Intelligence (AI) is a field that has a long history but is still constantly and actively growing and changing faster. In this course, you'll learn the basics Logic and Mathematics required for modern AI as well as some of the representative applications of AI. Along the way, we also hope to excite you about the numerous applications and huge possibilities in the field of AI, which continues to expand human capability beyond our imagination at a higher pace.

What is Artificial Intelligence (AI)?

Are you see in English movies; Sentient, self-aware robots are closer to becoming a reality. Developing computer systems that equal or exceed human intelligence is the crux of artificial intelligence. Artificial Intelligence (AI) is the study of computer science focusing on developing software or machines that exhibit human intelligence, 85 times faster!

Obviously, there is a lot more to it. AI is a broad topic ranging from simple calculators to self-steering technology to something that might radically change the future.

Goals and Applications of AI

The primary goals of AI include deduction and reasoning, knowledge representation, planning, natural language processing (NLP), learning, perception, and the ability to manipulate and move objects. Long-term goals of AI research include achieving Creativity, Social Intelligence and human level Intelligence.
Broadly, AI is classified into the following:

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<th><strong>Machine Learning</strong></th>
<th><strong>Neural Networks</strong></th>
<th><strong>Deep Learning</strong></th>
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<td>Machine learning is the science of getting computers to act without being explicitly programmed. In the past decade, machine learning has given us self-driving cars, practical speech recognition, effective web search, and an improved understanding of the human genome. Machine learning is so pervasive today that you probably use it dozens of times a day without knowing it.</td>
<td>An Artificial Neural Network (ANN) is an information processing paradigm that is inspired by the way biological nervous systems, such as the brain, process information. The key element of this paradigm is the novel structure of the information processing system. It is composed of a large number of highly interconnected processing elements (neurones) working in unison to solve specific problems. How many neurons are there in your body? How your brain give instant instructions to act? What can happen, if you modify a robot with Artificial Intelligence to act 85 times faster than your brain?</td>
<td>Deep learning methods are becoming exponentially more important due to their demonstrated success at tackling complex learning problems. Using deep learning (thanks to ConvNets / CNNs) to analyze satellites images. Conclusions reached from an U.S. Intelligence Advanced Research Projects Activity (IARPA) challenge. For example, deep learning system is more than 85 times faster than human analyst.</td>
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Suppose a doctor injects a Nano molecule to a heart patient’s bloodstream. After two months, while walking through the street, he gets SMS on his mobile asking him to get admitted to the nearest hospital within 10 minutes as he is likely to get cardiac arrest. How he got the message? The nano molecule is sending his pulse and other health related readings to the doctor’s server which in turn uses Artificial Intelligence to send the message.
### Types of AI

While there are various forms of AI, we can divide it into the following three categories based on AI's capabilities:

| **Weak AI** | It is also referred to as Narrow AI, focuses on one task. There is no self-awareness or genuine intelligence in case of a weak AI.  
iOS Siri is a good example of a weak AI combining several weak AI techniques to function. It can do a lot of things for the user, and you’ll see how “narrow” it exactly is when you try having conversations with the virtual assistant. |
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<td><strong>Strong AI</strong></td>
<td>It is also referred to as True AI, is a computer that is as smart as the human brain. This sort of AI will be able to perform all tasks that a human could do. There is a lot of research going on in this field, but we still have much to do. You should be imagining Matrix or I, Robot here.</td>
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<td><strong>Artificial Superintelligence</strong></td>
<td>Artificial Superintelligence is going to blow your mind if Strong AI impressed you. Nick Bostrom, leading AI thinker, defines it as “an intellect that is much smarter than the best human brains in practically every field, including scientific creativity, general wisdom and social skills.”</td>
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It is due to Artificial Superintelligence many prominent scientists and technologists, including Stephen Hawking and Elon Musk, have raised concerns about the possibility of human extinction.

Today’s AI-based computers can beat chess champions, so it’s safe to say that little by little the world is taking a turn.

### AI EXAMPLES

Artificial intelligence is no longer a product of our imagination. AI is real and we use it daily. Here are the examples:

1. **Self Driving Cars**
   Google came up with its first self-driving car in 2011. Four states in the US – including Washington D.C – were convinced that the autonomous car should be allowed to be tested on the streets. Things have changed a lot since, and increasingly more auto companies gained an interest in the technology. Tesla’s Model S autopilot feature is mind-blowing, and Elon Musk says this is just the beginning.
2. Amazon Echo
Echo is Amazon’s newest voice-activated smart home device. It is practical and accessible, and it packs a wealth of features and integrations. The compact AI device is a more advanced version of Apple’s Siri. Use it as a voice assistant, send requests and get things done around the house fast and effortless.

3. Autonomous
Your Personal Robot – Autonomous is the creator of Personal Robot, a really cool new product that connects to all smart devices in your home. It uses artificial intelligence software to make your home secure, and advanced algorithms to “read” your mood. Personal Robot doesn’t just understand; it actually knows what you want and need. On top of everything, it collects data being able to learn and improve on a daily basis. Some of its core features include facial recognition, emotion recognition, and deep learning.

The Internet has opened the ability to research everything within an instant, search engines such as Google allows you to input your symptoms and a number of answers pop up. Technology can improve your health and technology is certainly getting smarter to narrow down the correct health implications

AI IN THE PRESENT
Sophia is the luckiest robot with limited Artificial Intelligence (AI) who received citizenship in the Kingdom of Saudi Arabia. She praises Elon Musk. Elon Musk is planning to inject electrodes to human brain to enable them to think faster than super computers. Think where we are heading? In future, can Sophia create an AI man to marry her and live happily thereafter without fearing death?

Summer Foundation Course on Artificial Intelligence & Robotics
Artificial Intelligence is the sunrise industry which will wipe off many existing job opportunities and conquer the universe at astonishing speed. In another two years’ time, an expert in AI can amass unbelievable money due to exponential growth.

World Genius Council foresee this and we have already introduced Artificial Intelligence as one of our optional subject for World Genius Search Examination (WGSE), though it is not part of our curriculum so far.

Hence WGC is helping the students to grab the first mover advantage in AI through the Summer Foundation Course – Artificial Intelligence & Robotics.
Eligibility
Summer Foundation Course – Artificial Intelligence & Robotics is open to all students across the world for Cladd 7, 8 and 9; irrespective of the curriculum they follow.

Selection Process:
Parents need to register student’s name at our website www.worldgenius.global using the link for Summer Foundation Course – Artificial Intelligence & Robotics. The following are the conditions for admissions.
1. Those who have already appeared for WGSE 2017 or planning to appear for WGSE 2018 can submit their applications for the internship program
2. The booking amount should be remitted along with the application (or immediately after filling the Application) – Refer Fee Structure for details.
3. If the Student is not registered for WGSE 2018, which is to be held on 1st Feb, 2018, they can register for the same with their school. If the school needs any clarification, you may request them to contact us.
4. The list of applicants will be displayed on our website along with their WGSE 2018 Scores on 4th April, 2018.

The required materials will be delivered at your home and the student can commence their prescribed activities and ‘Own the Ownership of Learning’ (OOL Concept) at a revolutionary pace.

Subjects and Areas Covered
1. Mathematics
2. Logic
3. Designing Intelligent Agents
4. Knowledge, Reasoning & Planning
5. Quantifying Uncertainty
6. Probabilistic Reasoning
7. Solving Real-World Problems
8. Search, Games And Machine Learning
9. Constraint Satisfaction Problems
10. Robotics
11. Programming through Python

Note : Books, Notes, Video Clippings and other required tools will be provided to them. Internet is required to view suggested and prescribed videos.

Duration
45 days; commencing from 16th April, 2018

Requirements
A good desktop or laptop with high speed internet connection is required

Calibrated Assessments, Certification & Rewards
Our dynamic assessment mechanism will be vividly focused on how children can develop and focus their skill sets for Artificial Intelligence. Depends on their performance, scores, certificates and medals will be awarded.
Fee and Booking Fee

Parents can book admissions of their children by paying the fee. Early bird incentives are available to the first 100 registrations or bookings on or before 31st December 2017; class wise. If 100 bookings are completed prior to 31st December 2017, early bird incentives won’t be applicable for further registrations. The following are the details:

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<th>Class</th>
<th>INDIA</th>
<th>OUTSIDE INDIA</th>
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<td>Early Fee ₹</td>
<td>Full Fee ₹</td>
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How to pay?

You can pay by Cash at the counter / IMPS / NEFT / Cheque or cash deposit in any of the State Bank of India Branches. Please mail us the scanned copy of the counter foil as you transfer / deposit the money along with student’s details to response@worldgenius.global

The Account details:  
Contact Details:

Account Name:  
WORLD GENIUS CONCLAVE PRIVATE LIMITED  
Account Number: 34880765168  
STATE BANK OF INDIA,  
New Panvel Branch, Navi Mumbai  
IFSC: SBIN0060383  
SWIFT CODE: SBININBB531  
PAN: AABCW6335Q  
GSTIN: 27AABCW6335Q1ZO  

WGC International Help Desk :  
(+91) 83 01 83 9000  
email:  
response@worldgenius.global  
www.worldgenius.global

What next?

It is time for you to act for your child. World Genius Council is calling you. Book a seat for your child now!