



O.P. JINDAL GLOBAL
INSTITUTION OF EMINENCE DEEMED TO BE
UNIVERSITY
A Private University Promoting Public Service



JINDAL CENTRE *for*
DIGITAL SCIENCES

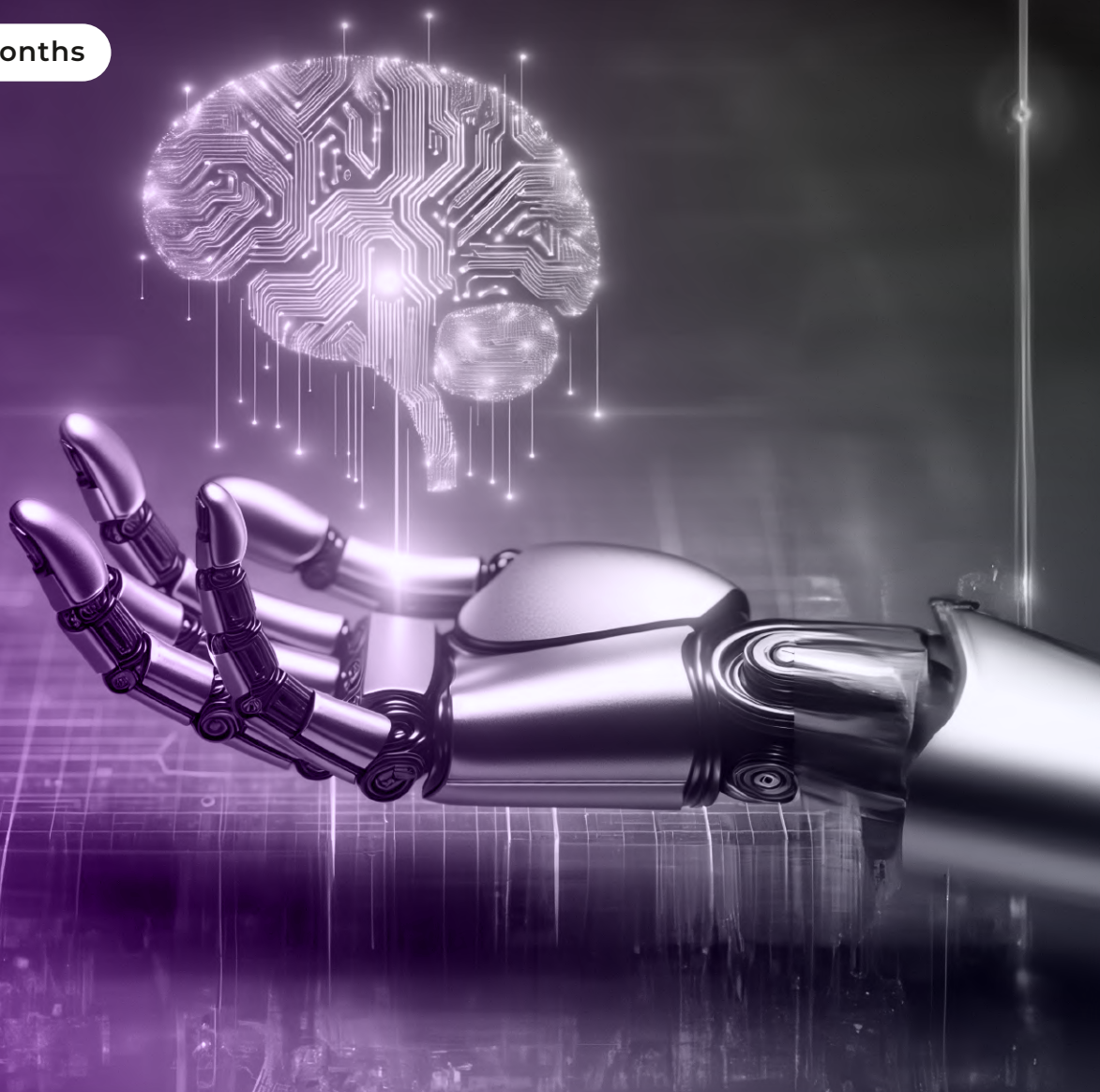
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upGrad

Master's in **Artificial Intelligence & Data Science**

Demystifying Algorithms, Empowering Intelligence

Duration: 12 Months



Message from Vice Chancellor of OP JGU and Director of JCDS



Dr. C. Raj Kumar

LL.B. (Delhi), B.C.L. (Oxford),
LL.M.(Harvard), S.J.D
(Hong Kong)

Founding Vice Chancellor,
O.P. Jindal Global University
Professor & Dean,
Jindal Global Law School

Dear Prospective Students,

I am excited to announce the launch of O.P. Jindal Global University's Master's in Artificial Intelligence and Data Science, under the Jindal Centre for Digital Sciences. This program is designed to equip you with advanced knowledge and practical skills in AI and data analytics, key drivers of today's digital revolution. You will benefit from a rigorous curriculum, expert faculty, and hands-on experience, preparing you to tackle real-world challenges and lead innovation. Join us at JGU and be part of a dynamic community shaping the future of technology.

We look forward to welcoming you!



Prof. Dr. Dinesh Singh

University Professor &
Director, Jindal Centre for
Digital Sciences (JCDS),
O.P. Jindal Global University

Dear Future Innovators,

Welcome to the Jindal Centre for Digital Sciences! We are thrilled to have you embark on this exciting journey with us. Our Master's in Artificial Intelligence and Data Science offers an ideal blend of in-depth academic training and hands-on experience, ensuring you gain the expertise needed to thrive in today's rapidly evolving tech landscape. With guidance from our accomplished faculty, you'll tackle real-world challenges, unlocking new possibilities in AI and data science. At JCDS, we are committed to nurturing your potential and helping you become a leader in digital innovation.

We look forward to supporting your success!

About JGU

Jindal Global University

O.P. Jindal Global University (JGU) is a multi-disciplinary, research-oriented university founded in 2009 by Mr. Naveen Jindal, in memory of Mr. O.P. Jindal. The university has faculty from 50+ countries, students from 75+ countries, and partnerships with 475+ institutions in 75+ countries.

RANKINGS:

India's #1 Private University
(QS World University
Rankings, three years in
a row)

Top 150 Global Young
Universities (QS Young
University Rankings)

Top 500 for Graduate
Employability
(QS 2022)

**Recognized as "Institute
of Eminence"**
by the Ministry of
Education, Government
of India (2020)

Jindal Centre for Digital Sciences

The Jindal Centre for Digital Sciences (JCDS) is dedicated to advancing STEM through a focus on artificial intelligence, algorithmic intelligence, and data science. It equips students and professionals with the skills needed for today's digital world, offering a Master's in Artificial Intelligence and Data Science that combines theory with hands-on experience. JCDS promotes innovation, interdisciplinary collaboration, and industry partnerships, preparing graduates for global digital challenges. With a distinguished faculty in fields like quantum computing and machine learning, JCDS is committed to shaping the future of technology and data-driven decision-making.

About upGrad

“upGrad is a leading global learning and workforce development company. We’re on a single-minded mission of powering career success for every member of the global workforce as their trusted lifelong learning partner. Established in 2015, we have over 10 million learners who have upskilled in a range of online and offline programs from top universities in India and the world.”



Ronnie Screwvala
Co-founder & Executive Chairman

GSV EDTECH 150
Top 150 Most Transformative
Growth Companies

**BRANDON HALL
GOLD AWARDS**
15+ Across 2 Years

PROMISING BRAND 2022
The Economic Times

**EDUCATION COMPANY
OF THE YEAR**
VC Circle, 2022

Entrepreneur India
**EDUCATION INNOVATION
AWARDS 2020**
Best Communication &
Teaching Platform

Current Industry Trends

14.4 LPA

Average salary
for data scientists
in India (2024)

Source: AmbitionBox

57.5%

CAGR of Indian
data science market
till 2028

Source: Millenniumpost

50%

Increase in search
volume for 'Data Science'
since 2020

Source: Exploding Topics

36%

Global increase in
data science job growth
by 2031

Source: Harvard Extension School

\$378.7B

Size of global
data science market
by 2030

Source: Millenniumpost

Program Highlights



Here are the
top 8 reasons why
you should consider
the **JGU Master's
in AI & DS**



Optimised for Efficient Learning

First and only one-year AI master's in India at an affordable price point



Designed by Eminent Faculty

Distinguished faculty at JGU, including Professor Dinesh Singh (Padma Shri awardee) have curated the curriculum



Zero to One Principle

From intuitive maths concepts to technical expertise and business application. No prior coding experience required



Diverse Range of Outcomes

Unique blend of analytics, data science, and AI/ML skills for achieving range of outcomes in the DS/ML/AI industry



Infused with GenAI

Dedicated GenAI modules for coding and data science efficiency along with a dedicated course on GenAI technologies



Microsoft Certification

Chance to earn a complementary Microsoft certificate



Capstone Project Choices

Selection of capstone projects across various industries, including finance, healthcare, and ecommerce

Faculty and Experts



Professor (Dr.) Dinesh Singh
University Professor & Director,
Jindal Centre for Digital Sciences (JCDS),
O.P. Jindal Global University

Professor (Dr.) Dinesh Singh, an eminent academic leader, has held pivotal roles including Vice Chairman & Chair EC of the Jammu & Kashmir Higher Education Council, Vice Chancellor of the University of Delhi, and Director of South Campus. He is honored with the Padma Shri, one of India's highest civilian awards, and has been recognized as an AICTE Distinguished Chair Professor. His academic journey spans institutions like the University of Houston and Imperial College, London.



Professor (Dr.) Akshay Agrawal
Associate Professor & Associate Director,
Jindal Centre for Digital Sciences (JCDS),
O.P. Jindal Global University

Professor (Dr.) Akshay Agrawal specializes in Numerical Methods, Mathematical Modelling, Algorithm Development, and Optimization. With a Ph.D. and M.S. from the University of Houston, his research focuses on optimizing plane wave directions in discontinuous Galerkin methods. Dr. Akshay is proficient in MATLAB, Python, and C/C++ and has extensive experience in Statistical Computing, Big Data Analysis, and Machine Learning.



Professor (Dr.) Jitendra Prakash
Associate Professor & Associate Director,
Jindal Centre for Digital Sciences (JCDS),
O.P. Jindal Global University

Professor (Dr.) Jitendra Prakash is a mathematician working in quantum information theory. He earned his Ph.D. in Pure Mathematics from the University of Waterloo and the University of Houston. He has held postdoctoral positions at the University of New Orleans and at the University of Copenhagen. Dr. Prakash's research focuses on the applications of operator algebraic techniques in quantum information, with a particular emphasis on nonlocal games and the device-independent certification of quantum devices.



Professor (Dr.) Jatin Anand
Assistant Professor & Assistant Director,
Jindal Centre for Digital Sciences (JCDS),
O.P. Jindal Global University

Professor (Dr.) Jatin Anand is a distinguished mathematician with over 12 years of experience, specializing in Composition Operators, Invariant Subspaces, Functional Analysis, and Operator Theory. He earned his Ph.D. from the University of Delhi, where he also completed his master's and bachelor's degrees with honors in Mathematics. Dr. Anand has served as a Research Associate III at the University of Delhi South Campus, conducting postdoctoral research on the asymptotics of linear and non-linear solutions to delay differential equations.

Industry Experts



Mirza Rahim Baig
Startup Mentor



INDIA ACCELERATOR

Expertise in:
Machine Learning, Predictive Analytics,
Business Analytics

 **zalando**
Team Lead - Product
Analysis

 **NMIMS**
Deemed to be UNIVERSITY
Marketing Analytics
Visiting Professor

Flipkart 
Ex-Analytics Lead



Anand
CEO

Gramener
A Straive Company

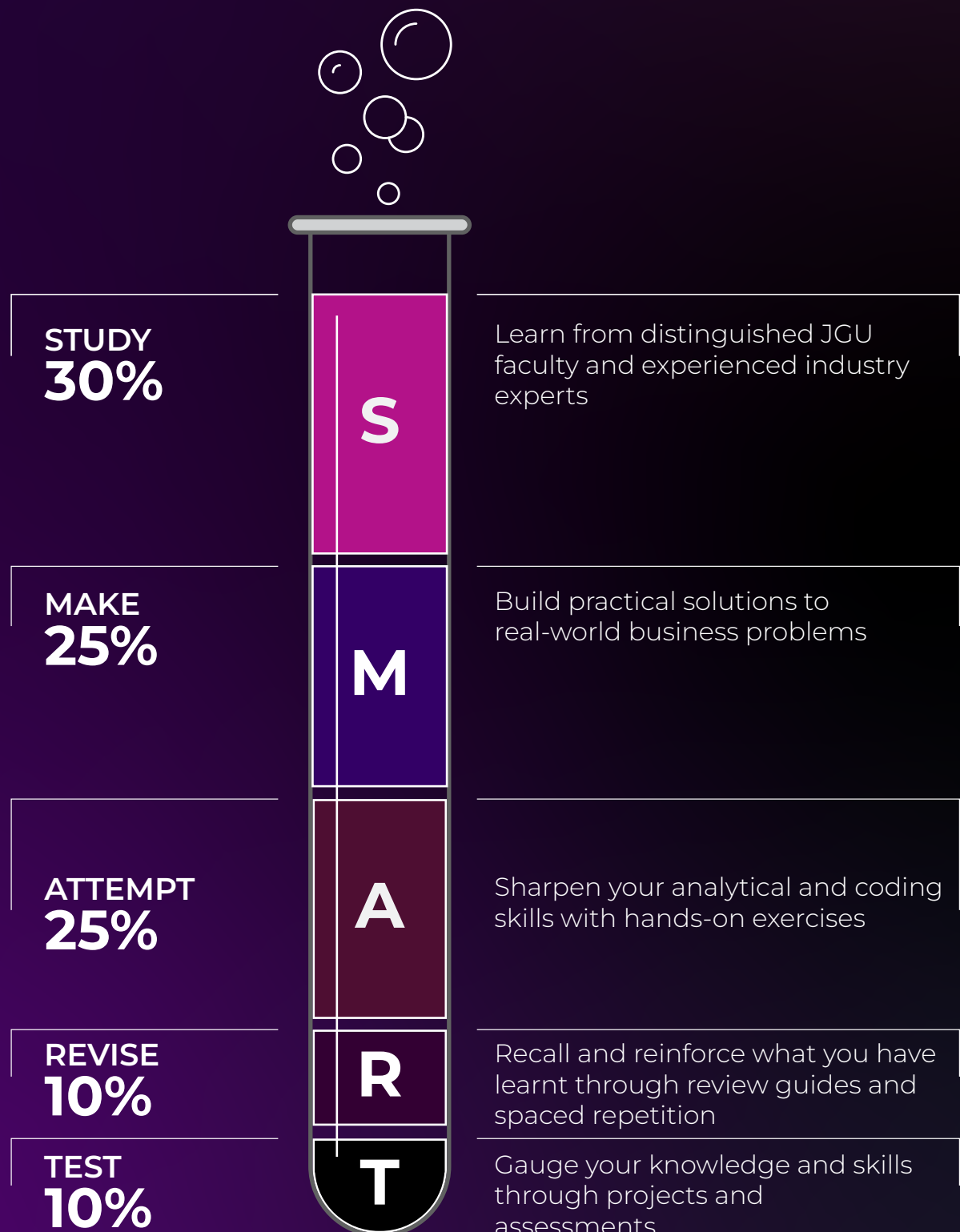
Expertise in:
Data Storytelling, Data Visualisation

 **IIT MADRAS**
Indian Institute of Technology Madras
Facutly

Infosys
Prinicpal

BCG
Ex-Consultant

OUR **S.M.A.R.T**
FORMULA
HELPS YOU
LEARN BETTER



Core Curriculum

Trimester - I

Mastering the Building Blocks of Data Science - Probability and Statistics	4 credits
Mastering the Building Blocks of Machine Learning - Linear Algebra and Calculus	4 credits
Building Expertise in Python Programming for Data Science and Machine Learning	4 credits
Generating Meaningful Insights in Data	4 credits
Building Familiarity with Universal Python Libraries for Data Science and Machine Learning	4 credits
Complementary Microsoft Course - 1*	

Trimester - II

Unravelling Machine Learning Fundamentals	4 credits
Demystifying Deep Learning and its Applications	4 credits
Conducting Analytics at Large Scale on Big Data	4 credits
Building Familiarity with Popular Analytics Tools such as Excel, Power BI, and Tableau	4 credits
Mastering the Structured Management of Databases	4 credits
Complementary Microsoft Course - 2*	

Trimester - III

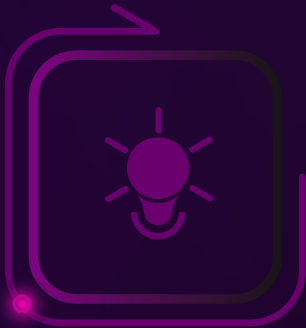
Mastering Classical Machine Learning Models	4 credits
Building Familiarity with Modern ML & AI Technologies for Businesses	4 credits
Complementary Microsoft Course - 3*	
Business Domain Based Capstone Project	12 credits
Total Duration of the Program	1 year
Total Credits of the Program	60 credits

*Note: Please note that these highlighted courses are non-credit bearing and non-mandatory.

Tools



Capstone Project Choices



Financial Credit Fraud Detection

Develop a credit card fraud detection model, conduct cost-benefit analysis, and present key insights to stakeholders.

Marketing and Retail Analytics

Optimise product category management using business analysis principles, market basket insights, and a dashboard to enhance sales and guide strategic decisions.

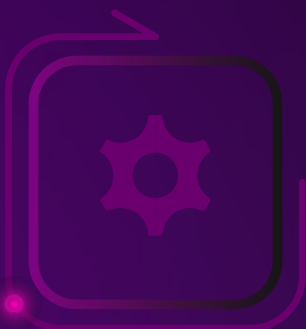


Ecommerce Analytics

Analyse revenue dips and customer churn, build a market mix model to optimise marketing spend, and present findings with strategic recommendations to stakeholders.

Customer Sentiment Analysis and Product Recommendation

Build a dynamic recommendation system with integrated sentiment analysis, experimenting with ML models, and deploy for real-world application.



MRI Data Enhancement for Healthcare Analytics

Develop a system to generate artificial MRI images with varying contrast levels, enhancing diagnostic accuracy by providing multiple imaging perspectives from a single scan.

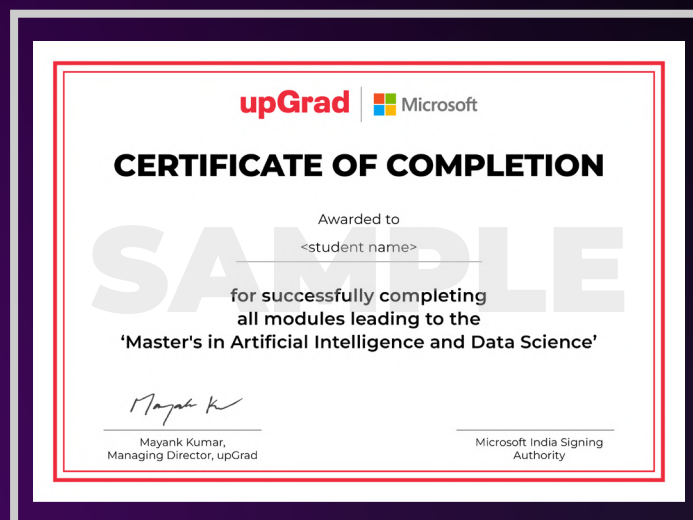
Master's in Artificial Intelligence and Data Science Certification

Earn valuable credentials and recognition

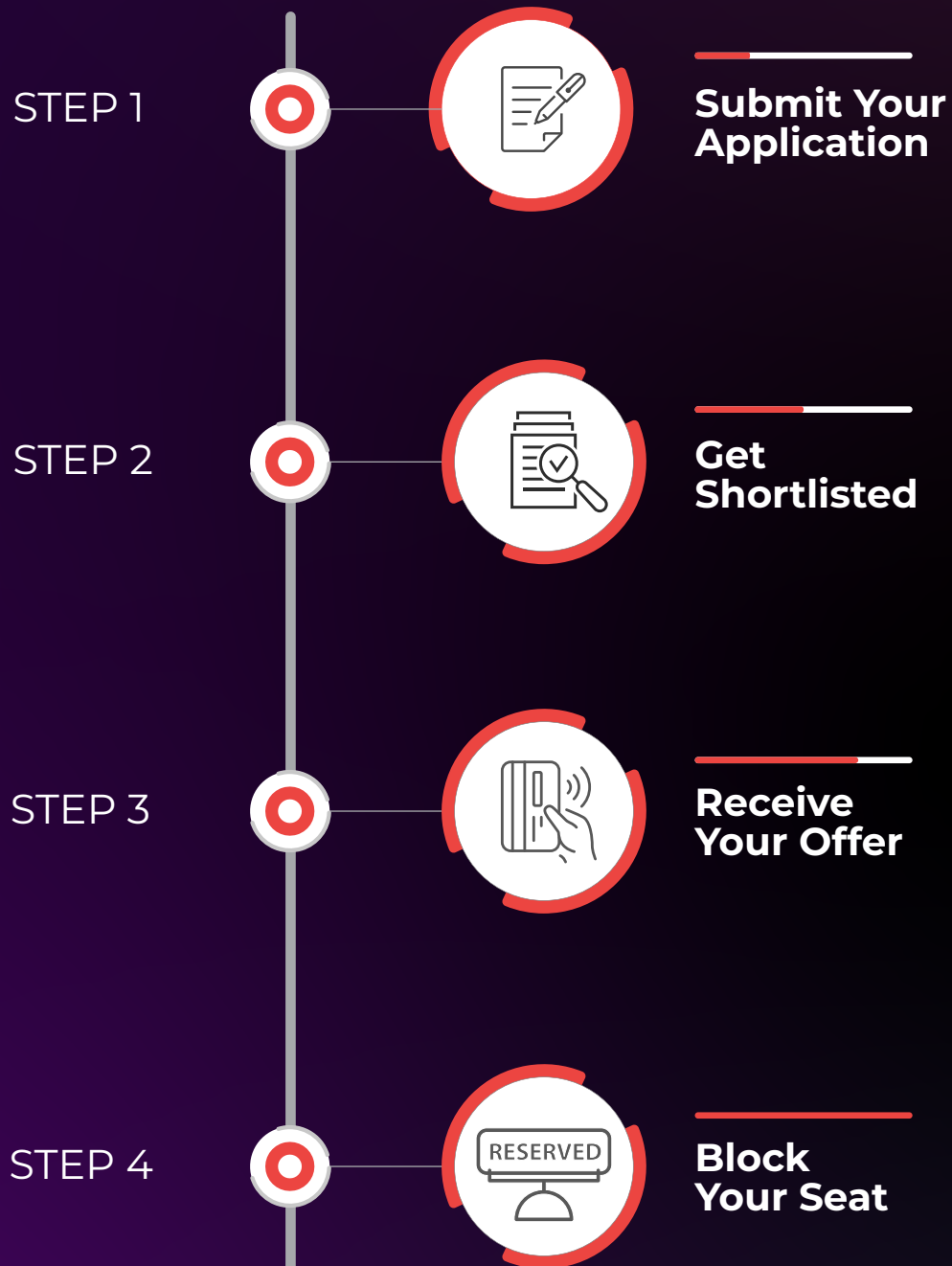
Certification of
Master's in Artificial intelligence and Data science



Mircrosoft Certification



Enrol in 4 small steps,
Then take a giant leap.



Eligibility Criteria:

- The candidate must hold a bachelor's degree
- Candidates who have less than 50% marks in graduation have to appear for an online Entrance examination



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admissions@upgrad.com



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LET'S TALK