

# Curriculum Mapping for Student Employability

Advance Campus Curriculum with Blended Learning Curations

**coursera** for campus

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### **Foreword**

Propelled by 4G and driven by personal technology devices, digitization has transformed the world radically in the last decade. In this time frame, internet adoption has more than doubled from merely 28% of the global population to 65%. The reliance on technology within workplaces has created a need for greater speed and efficiency, which is being made possible thanks to strong investments in automation, machine learning (ML), and artificial intelligence (AI).

Between 2015 and 2020, jobs in automation and AI have grown by 530% and 479%² respectively. In addition, the recent COVID-19 pandemic caused a paradigm shift, further embedding digital technology into daily life³ so that work, commerce, and learning could continue in a suddenly remote world.

Technology advancement is consistently fueling the demand for digital workers, yet there is a shortage of candidates who possess the required data science, AI and ML, digital marketing, and automation skills with almost a million tech jobs remaining unfilled in the U.S.<sup>4</sup> Businesses are betting big on these emerging technologies and are projected to spend \$656 billion<sup>5</sup> on them in 2021. Yet nearly 46% of companies<sup>6</sup> do not have the right skills within their existing workforce to fully utilize their adopted technologies.

Similarly, universities and colleges have been challenged by advancement in technology, struggling to ramp up their curricula to help students keep pace with the digital skills expected by employers. According to a recent Gallup and Strada Education Network research report, only 34% of college students feel adequately prepared to face their jobs, and 89% of employers feel that college grads are not job-ready. Apple CEO, Tim Cook, states that there is a "mismatch between the skills that are coming out of colleges and what the skills are that we believe we need in the future."

With student employability serving as a key criterion for reputation building, <sup>11</sup> universities and colleges must find ways to evolve their curricula to equip students with the skills that employers need. One possible solution is for universities and colleges to partner with online learning platforms to help address student skills gaps. In fact, employers respond favorably to candidates who have a degree that incorporates online learning—90% of employers <sup>12</sup> would hire candidates who validate their knowledge using a certification, digital badge, or coursework in addition to their college degree.

In this eBook, Coursera presents six blended learning curriculum maps to demonstrate how online content can supplement on-campus learning, focusing on popular academic disciplines such as engineering and business. With this support, your institution will be better prepared to implement successful blended learning experiences that drive employability for your students.

### Methodology

Since our inception in 2012, Coursera has remained focused on helping learners leverage high-quality online content from leading university and industry educators to develop in-demand skills. Together with our partners, we offer more than 4,000 courses across myriad job-relevant subjects such as computer science, language learning, data science, business, and more.

With more than 82 million learners, 2,000 business customers, 4,000 academic institutions, and 300 government entities as of March 2021—highly diverse in geography and industry—Coursera is in a unique position to understand the job-relevant skills that are needed in the modern workforce. The curriculum maps presented in this eBook were built upon skill insights derived from Coursera's larger learner base and curated by higher education experts on Coursera's Skills Transformation team.

The pre-packaged curriculum maps serve as a proposed guideline for universities and colleges looking to integrate online learning. At their discretion, each institution should evaluate the maps as they apply to their individual curriculum goals, uses, institutional policies, accreditation rules, and applicable regulations, particularly related to the adoption of online content within credit-bearing programs.





# Academic Discipline: **Computer Science Engineering**Skills Emphasis: **Artificial Intelligence**

Artificial intelligence is proving to be one of the most disruptive innovations in the tech industry. <sup>13</sup> In the last four years alone, the number of businesses using Al has grown by 270%. <sup>14</sup>

Al will have far-reaching impacts across different industries, making it a valuable skill for today's computer science graduates. Sectors such as medical, automotive, cybersecurity, and ecommerce are the biggest beneficiaries of this invention. For instance, Al chatbots can service up to 90% of customer queries and are slated to save businesses \$8 billion annually in 2022. Likewise, in the healthcare sector, Al can create significant time and cost savings by using huge datasets to identify the right people for clinical trials and gain insights into results, thereby accelerating the development of drugs and vaccines. Al is also used in market research and a relevant example is IBM's Watson, which can help businesses by reviewing the competitive landscape and generating detailed reports.

A computer science engineering degree incorporating online courses that equip students with AI skills can make a significant difference in job-readiness. In courses like Introduction to TensorFlow for AI, ML, and Deep Learning by DeepLearning.AI, for example, students can learn skills to develop solutions that are in high demand in the workforce, such as AI chatbots for customer service or smart APIs for powering AI solutions.

#### **Skills and Job Opportunities**

#### Skills<sup>16</sup>

**Machine Learning** 

Ethics of Al

**Cloud Computing** 

**Deep Learning** 

**Neural Networks** 

#### Job Opportunities<sup>17</sup>

Artificial Intelligence Specialist

**Data Scientist** 

**Data Engineer** 

**Big Data Developer** 

Data Analyst

# Academic Discipline: **Computer Science Engineering**Skills Emphasis: **Artificial Intelligence**

		Emerging Skills			
Semester 1	Physics	Engineering Graphics	Calculus & Linear Algebra	Introduction to Electronics, Georgia Institute of Technology	Al for Everyone, DeepLearning.Al
Semester 2	Chemistry	Probability & Statistics	<u>Learn to Program</u> , University of Toronto	Communication	Introduction to Machine Learning, Duke University
Semester 3	Data Communications	<u>Data Structures and Algorithms</u> , University of California San Diego & HSE University	Digital Electronics	Discrete Mathematics	Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning, DeepLearning.Al
Semester 4	Computer Architecture, Princeton University	Computer Networks	Operating Systems	Algorithm Design	Machine Learning: Regression & Machine Learning: Classification, University of Washington
Semester 5	Database Management Systems	Formal Language & Automata Theory	Object Oriented Programming in Java, Duke University	Software Engineering (I)	Machine Learning: Clustering & Retrieval, University of Washington
Semester 6	Software Engineering (II)	Software and Compiler Design	Elective 1	Elective 2	Build Decision Trees, SVMs, and Artificial Neural Networks, CertNexus
Semester 7	Colloquium: Sentimental Analysis or	Introduction to Big Data, University of California San Diego			
Semester 8	Colloquium: Object Detection with A	Machine Learning With Big Data, University of California San Diego			

### Academic Discipline: **Mathematics and Computing**Skills Emphasis: **Data Science**

Every day, people generate 2.5 quintillion bytes of data, <sup>18</sup> thanks to growing technologies like the Internet of Things (IoT), high-speed internet, social media content platforms, and customer data tools. Roughly 80–90% of this data is unstructured <sup>19</sup> and is not useful in its original form. It is up to businesses—and their talent—to generate insights from the raw data and use it to inform critical decisions such as budgeting, marketing strategies, and hiring approaches. This requires data science expertise.

A data scientist uses skills such as programming, statistics, and data visualization to interpret data. By completing courses such as Applied Data Science with Python offered by DeepLearning.AI and Learn SQL Basics for Data Science Specialization by UC Davis as part of a data science emphasis, math and computer science students can build the skills needed to work with customer and business datasets, build predictive models that can help drive sales, and create data visualizations.

The demand for data scientists will remain high for the foreseeable future and hiring for data science positions grew by 46% in 2020 alone.<sup>20</sup> Universities and colleges are in an excellent position to take part in this evolution by offering courses that prepare graduates for these emerging jobs.

#### **Skills and Job Opportunities**

#### Skills<sup>21</sup>

Statistics

**Data Analysis** 

Programming

**Data Visualization** 

**Big Data** 

#### **Job Opportunities**<sup>22</sup>

Artificial Intelligence Specialist

Data Scientist

**Data Engineer** 

Big Data Developer

Data Analyst

# Academic Discipline: **Mathematics and Computing**Skills Emphasis: **Data Science**

		Emerging Skills			
Semester 1	General Physics	Introduction to Engineering Mechanics, Georgia Institute of Tech	Introductory Chemistry	Humanities	Tools for Data Science, IBM
Semester 2	Calculus & Linear Algebra	Introduction to Computer Aided Engineering Drawing	Introduction to Electronics	Ethics, Technology and Engineering, Eindhoven University of Technology & 4TU.Ethics	Code Free Data Science, University of California San Diego
Semester 3	Differential Equations	<u>Data Structures and Algorithms</u> , University of California San Diego & HSE University	Signals and Systems	Economics	<u>Learn SQL Basics for Data Science</u> <u>Specialization</u> , University of California Davis
Semester 4	<u>Probability and Statistics</u> , University of London	Theory of Computation	Numerical Analysis	Matrix Computation	Python Data Products for Predictive Analytics Specialization, University of California San Diego
Semester 5	Mathematics for Machine Learning: Linear Algebra, Imperial College London	Analysis and Design of Algorithms	Number Theory	Game Theory	Applied Data Science with Python, University of Michigan
Semester 6	Discrete Optimization, University of Melbourne	Computing Lab	Fuzzy Logic and Application	Graphical Models	Introduction to Machine Learning in Production, DeepLearning.Al
Semester 7	Colloquium	<u>Data Science Ethics</u> , University of Michigan			
Semester 8	Colloquium	<u>Design and Simulate Smart Home Networks</u> <u>in Packet Tracer</u> , Guided Project			

### Google Career Certificate:

### **Google Data Analytics Professional Certificate**

Data Analytics is a fast-growing field with over 337,000 open jobs in the U.S. alone. To help you prepare for a career in Data Analytics, Google offers an eight-course certificate program on Coursera which encompasses modules from the Foundations of Data all the way to Data Analysis with R Programming. In the end, a Capstone project will help you apply your learnings in order to showcase your skills that will span data cleaning, critical thinking, data visualization, and more.

This course is taught by Google employees whose foundations in data analytics served as the launchpads of their own careers and is paced at around 10 hours per week. Upon successful completion of this certificate, you can apply for an entry-level data analytics job with over 150 U.S. employers such as Google, Walmart, and Best Buy and kick-start your career in Data Analytics.





### Academic Discipline: **Engineering Mechanics**Skills Emphasis: **Robotics**

Robotics unites three important fields: engineering, science, and technology. With the increasing need for automation and smart production,<sup>23</sup> robotics skills are now more valuable than ever. Robotics are being applied across industries worldwide, with military, healthcare, agriculture, and manufacturing sectors being some of the biggest adopters.<sup>24</sup>

It is expected that 88% of businesses globally will employ some form of robotics for their operations. Due to the demand, this industry will witness a huge growth of 15–20% per year until 2028, generating \$20\$ billion in revenue.  $^{25}$ 

By taking courses such as Motion Planning for Self-Driving Cars by University of Toronto and Introduction to Machine Learning in Production by DeepLearning.Al, students can learn how to configure robots, and work on cutting-edge developments like self-driving vehicles, warehouse automation bots, predictive maintenance devices for factories, and remote monitoring sensors for supply chain.

#### **Key Skills**

#### Skills<sup>26</sup>

**Motion Planning** 

**Kinematics** 

**Optimal Control** 

**Constraint Algorithm** 

Simulation

# Academic Discipline: **Engineering Mechanics**Skills Emphasis: **Robotics**

		Emerging Skills			
Semester 1	Introduction to Engineering Visualization	Electromagnetic Waves & Quantum Mechanics	Calculus & Linear Algebra	Introduction to Electronics, Georgia Institute of Technology	Foundations of Robot Motion, Northwestern University
Semester 2	Introduction to Engineering Mechanics, Georgia Institute of Tech	Introduction to Computer Science	Ethics, Technology and Engineering, Eindhoven University of Technology	Introduction to Chemistry	Robot Kinematics, Northwestern University
Semester 3	Introduction to Material Science & Engineering	Data Structures and Algorithms, University of California San Diego & HSE University	Applied Mathematics for Engineers	Solid Mechanics	Robot Dynamics, Northwestern University
Semester 4	Fluid Mechanics	Numerical Methods and Computation	Digital Electronics	<u>Introduction to Thermodynamics</u> , University of Michigan	Robot Motion Planning and Control, Northwestern University
Semester 5	Dynamics of Mechanical Systems	Introduction to CAD, CAM, and Practical CNC Machining, AutoDesk	Basics of Product Design	Elective 1	Motion Planning for Self-Driving Cars, University of Toronto
Semester 6	<u>Discrete Optimization</u> , University of Melbourne	Computing Lab	Fuzzy Logic and Application	Graphical Models	Introduction to Machine Learning in Production, DeepLearning.Al
Semester 7	Colloquium	<u>Data Science Ethics</u> , University of Michigan			
Semester 8	Colloquium	<u>Design and Simulate Smart Home</u> <u>Networks in Packet Tracer,</u> <u>Guided Project</u>			

# Academic Discipline: **Business Administration**Skills Emphasis: **Data Analytics**

Unlike data science, which is more predictive, data analytics focuses on analyzing historical data in context. It helps organizations make sense of their data, allowing them to understand their customer needs better, identify areas of improvement, evaluate marketing and sales campaigns, and provide personalized solutions. This requires a data analysis skill set.

As a market, data analysis is set to reach \$100 billion by 2023.<sup>27</sup> Data analytics is a high-growth field for today's students, and universities and colleges can now offer competitive programs by adding this skills emphasis to business majors. Tech, media, and financial companies, especially those that rely on subscription models for their revenue, need data analysts who can analyze customer data and help them improve customer engagement and lifetime value.

A business administration bachelor's degree with a skills emphasis in data analysis will introduce students to courses like Introduction to Data Analysis with Python offered by IBM and Digital Transformation by the University of Virginia. Students can apply skills gained through these courses to big data applications, data mining, social media sentiment analysis, and data product development in the workforce.

#### **Skills and Job Opportunities**

#### Skills<sup>28</sup>

Microsoft Excel

Tableau

**Data Visualization** 

Data Model

**Business Analysis** 

#### Job Opportunities<sup>29</sup>

**Business Intelligence Analyst** 

Data Analyst

**Quantitative Analyst** 

**Data Analytics Consultant** 

Operations / Marketing Analyst

# Academic Discipline: **Business Administration**Skills Emphasis: **Data Analytics**

	Core Subjects					
Semester 1	Financial Accounting Fundamentals, University of Virginia	Microeconomics	Mathematics for Business	Fundamentals of Marketing	Business & Society	Introduction to Data Analytics for Business, University of Colorado Boulder
Semester 2	Macroeconomics	Managerial Accounting	Financial Management	Information Systems	Business Statistics	<u>Data Analysis Tools,</u> Wesleyan University
Semester 3	Principles of Business Management	Business Finance	Business English, University of Washington	<u>Digital Transformation</u> , University of Virginia & BCG	Leadership	Business Analytics for Decision Making, University of Colorado Boulder
Semester 4	Organizational Behaviour	Business Strategy in Practice (Project-centered Course), University of Virginia	Business Ethics	Human Resource Management	Business Law	Excel Basics for Data Analysis, IBM
Semester 5	Operations Management	Sustainable Business	Business Case Analysis	Business Growth Strategy	Entrepreneurial Mindset, Tecnológico de Monterrey	Ask Questions to Make Data-Driven Decisions, Google
Semester 6	Strategic Management	International Business Venturing Abroad, University of Colorado Boulder	Business Communication	Quality Management	E-commerce Fundamentals (Elective)	<u>Data Analysis with Python</u> , IBM

# Academic Discipline: **Business Administration**Skills Emphasis: **Digital Marketing**

With the number of internet users crossing 4.72 billion,<sup>30</sup> companies are increasingly relying on digital platforms to communicate with customers. As such, digital marketing has become a critical component of many marketing organizations, with global digital ad spend touching \$455 billion in 2021 and expected to grow to as much as \$645 billion by 2024.<sup>31</sup>

Brands spend heavily on digital campaigns, which provide alternatives to traditional options—such as print, TV, and radio advertising. But commanding the digital world is not necessarily easy. In this highly competitive field, brands need different types of experts in their team.

One such specialist is the digital marketer, who is responsible for generating leads and building brand awareness. A digital marketer can focus on one area or possess different skills, such as social media, display ads, content marketing, email marketing, search engine marketing, and more.

For colleges and universities offering business majors, now may be an opportune moment to offer digital marketing as a skills emphasis. Providing courses like Measure and Optimize Social Media Marketing offered by Facebook and Artificial Intelligence in Marketing offered by the University of Virginia, candidates gain emerging skills, such as social media marketing and AI in marketing, to be competitive in today's job market.

#### **Skills and Job Opportunities**

#### Skills<sup>32</sup>

Social Media Marketing

Online Advertising

SEO/SEM

Campaign Management

Marketing Analytics

#### Job Opportunities<sup>33</sup>

**Growth Hacker** 

**Digital Marketing Specialist** 

**E-commerce Specialist** 

**Commerce Manager** 

**Head of Digital** 

# Academic Discipline: **Business Administration**Skills Emphasis: **Digital Marketing**

	Core Subjects					
Semester 1	Financial Accounting Fundamentals, University of Virginia	Microeconomics	Mathematics for Business	Fundamentals of Marketing	Business & Society	Digital Media and Marketing Strategies, University of Illinois at Urbana-Champaign
Semester 2	Macroeconomics	Managerial Accounting	Financial Management	Information Systems	Business Statistics	Facebook, Instagram, and Snapchat Marketing, Digital Marketing Institute
Semester 3	Principles of Business Management	Business Finance	<u>Business English</u> , University of Washington	Digital Transformation, University of Virginia & BCG	Leadership	Twitter, LinkedIn, and YouTube  Marketing,  Digital Marketing Institute
Semester 4	Organizational Behaviour	Business Strategy in Practice (Project-centered Course), University of Virginia	Business Ethics	Human Resource Management	Business Law	Artificial Intelligence in Marketing, University of Virginia
Semester 5	Operations Management	Sustainable Business	Business Case Analysis	Business Growth Strategy	Entrepreneurial Mindset, Tecnológico de Monterrey	Applying Data Analytics in Marketing, University of Illinois at Urbana-Champaign
Semester 6	Strategic Management	International Business Venturing Abroad, University of Colorado Boulder	Business Communication	Quality Management	E-commerce Fundamentals (Elective)	Measure and Optimize Social Media Marketing Campaigns, Facebook

# Academic Discipline: **Nursing**Skills Emphasis: **Nursing Informatics**

The growing demand for telehealth services, remote monitoring of patients, and a need to curb healthcare costs have led to the healthcare industry adopting tech in a big way. The recent COVID-19 pandemic also caused a surge in the adoption of telehealth. Compared to around 20% of the doctors who saw their patients remotely in 2018, 80% did so in 2020.<sup>34</sup> As the industry continues to embrace AI and IoT, it needs experts in different fields to offer solutions that improve patient care in this \$280 billion industry.<sup>35</sup>

Specializing in nursing informatics provides graduates an opportunity to not only find a meaningful career but also take part in the industry's tech evolution. The courses presented in this curriculum map, such as The Outcomes and Interventions of Health Informatics by Johns Hopkins University and Bioinformatic Methods by the University of Toronto, provide graduates with emerging skills like health informatics, digital health, and more, which are necessary for delivering clinical insights, using technology for supporting and enhancing patients' care and medication, and working to optimize the cost of operation.

#### **Key Skills**

#### Skills<sup>36</sup>

**Bioinformatics** 

Genomics

**Computational Biology** 

**Biostatistics** 

**Data Analysis** 

#### **Curriculum Map**

# Academic Discipline: **Nursing**Skills Emphasis: **Nursing Informatics**

	Core Subjects					
Semester 1	Anatomy, University of Michigan	Nutrition	Biochemistry	Assessing and Improving Community Health, University of Michigan	Introduction to Medical Surgical Nursing	Medical Surgery Specialty, University of Minnesota
Semester 2	Psychiatric Nursing	O.T. Techniques	General Pathophysiology, Saint Petersburg State University	Health Education	Medical Surgical Nursing Disciplines	The Outcomes and Interventions of Health Informatics, Johns Hopkins University
Semester 3	Medcial Surgery Speciality	Pediatric Nursing	Sociology & Social Health	<u>Disease Screening in</u> <u>Public Health</u> , University of Geneva & University of Lausanne	Emergency First Aid	Hacking COVID-19 — Course 1: Identifying a Deadly Pathogen, University of California San Diego
Semester 4	Midwifery & Obstetrics Nursing	Principles of Admin & Supervision	<u>Data Management</u> <u>for Clinical Research</u> , Vanderbilt University	Psychology	Trends in Nursing & Professional Development	Bioinformatic Methods I, University of Toronto



### **Additional Mappings to Strengthen Your Curriculum**

Coursera provides a wide selection of job-relevant content that can supplement existing curricula. As a result, the following academic disciplines and skills emphasis combinations are also possible by leveraging content currently offered on our platform.

#### **Engineering**

ACADEMIC DISCIPLINE	SKILLS EMPHASIS
Biochemical Engineering	Bioinformatics
Biomedical Engineering	Precision Medicine
Chemical Engineering	Battery Technology
Civil Engineering	Smart Cities
Electrical Engineering	IoT and Embedded Sensors
Mechanical Engineering	Digital Manufacturing
Textile Engineering	Nanotechnology

#### **Business**

ACADEMIC DISCIPLINE		SKILLS EMPHASIS
	Master of Business Administration	Digital Marketing
	Bachelor of Business Administration	AI/ML
	Bachelor of Business Administration	Entrepreneurship

#### Other

ACADEMIC DISCIPLINE	SKILLS EMPHASIS
Architecture	Urban Design
Nursing	Healthcare Tech & Analytics
English	Digital Marketing



### **Implementing Blended Learning Curriculum Maps**

There are several different ways that universities and colleges can integrate online content into their curriculum depending on their priorities, goals, and student needs. At Coursera, we believe in providing seamless online learning experiences that can also be easily implemented.

Here are two common ways that universities and colleges integrate online content on Coursera:

#### 1. Curriculum Integration

Integrating online learning into the core curriculum remains one of the strongest mechanisms for universities and institutions to ensure that students receive recognition for their online coursework. When applied at a program level, universities can award academic credits to students who successfully complete online courses and programs.

Offering academic credit for courses on Coursera may follow a specific process. This process takes into account the context for offering the course, as well as institutional priorities, design, and approval processes. Universities and colleges must have clear goals for partnering with Coursera and hold regular check-ins with faculty and students to ensure successful implementation. For more details, read <a href="The Campus Guide to Delivering For-Credit Online Learning">The Campus Guide to Delivering For-Credit Online Learning</a>.



### IITU brings academic excellence to the modern digital classroom by partnering with Coursera

Founded in 2009, International Information Technology University (IITU) educates future leaders and innovators in Kazakhstan. Powered by an ambitious plan for growth, IITU provides an academically rigorous, job-focused curriculum in technical disciplines.

#### Challenge

"Just as we prepare our students for their future industries, we have to think about the future of higher education. That future is online learning. Our goal is to convert about 30% of our course offerings online," explains Timur Umarov, Vice-Rector for Academic Affairs at IITU. "The challenge is to be modern and innovative without compromising our reputation for academic excellence." IITU also wanted to offer a variety of in-demand courses in English to provide its students with global experiences, as well as the opportunity to learn from world-class universities and professors.

#### Solution

Developing original course content can be costly and time-consuming, so when Coursera offered its catalog to interested institutions during the COVID-19 pandemic, IITU seized the opportunity—becoming the first university in

Kazakhstan to partner with Coursera.

"Coursera offers an impressive range of courses from leading universities and organizations worldwide, which gives us confidence that we're providing our students high-quality education that furthers their career opportunities," says Yevgenia Daineko, Vice-Rector for Science and International Collaboration at IITU.

Working with Coursera, IITU mapped learning objectives to standalone Coursera courses. The university tracks whether students meet learning objectives through faculty mentorship and final exams.

#### **Results**

- 2,000+ learners
- · 12,000+ course enrollments
- 45,000+ learning hours
- Learners gave Coursera an average rating of 4.9/5

Accurate reflections of student success help IITU stay in good standing with national organizations like the Kazakhstani Internal League of Academic Integrity, which



enforces criteria for student performance and academic standing. Maintaining a reputation for academic excellence allows IITU academic freedom to create more innovative, student-centered programs.

Umarov's team is invested in students' responses to Coursera, holding multiple meetings with student representatives. Students praise the clarity of instruction and high quality of course content. "The online courses have a positive impact on my English skills and also open up some shared learning insights between course modules that previously weren't obvious," says Irina Bulatova, a student studying multimodal literacies.

IITU continues to explore the potential of online learning through Coursera. Next, the university plans to expand their blended curriculum into more traditional classes.

# Implementing Blended Learning Curriculum Maps (continued)

#### 2. Multi-Disciplinary Learning

Some universities and colleges choose to offer these courses as elective curriculum for students to gain skills beyond their core curriculum. In this case, students can take courses in multiple domain areas to build career readiness and earn any desired certificates.

With cutting-edge content, Coursera delivers more than 5,000 courses and 1,000 Guided Projects, making it easy for universities to implement multi-disciplinary learning.



### Covenant University creates first blended curricula in Africa to drive industry-relevant learning, entrepreneurship, and prosperity



Covenant University is a private university located in Ota, Nigeria. Founded in 2002, it ranks among the top 500 global universities and fifth in Africa, according to the Times Higher Education World University Rankings, and maintains a reputation for having the most employable graduates in Nigeria.

#### Challenge

Fueled by its mission to raise a new generation of leaders, and to close the skills gap in Nigeria and more broadly across Africa, Covenant University augmented its campustaught courses with distance learning—creating Africa's first blended curriculum.

The subsequent arrival of the COVID-19 pandemic only reinforced the importance of investing in online learning capabilities. "We saw digital learning as the most effective way to provide new skills and perspective to our students that would give them a competitive edge in business and boost the African economy around them," explains Dr. Ada Peter, Director of International Offices and Linkages at Covenant University. "With this in mind, we sought to identify and partner with a globally recognized online learning provider."

#### Solution

After evaluating multiple online learning vendors, Covenant selected Coursera for Campus as a digital learning platform for its 9,000 undergraduate and graduate students.

"Coursera enabled us to leapfrog into the future by providing ready-to-go infrastructure for online learning," says Dr. Peter. "It would have taken us two or three years to create an equivalent offering on our own."

#### **Results**

- 9,000 undergraduate and graduate students now benefit from blended learning
- 3,800 new courses available to faculty and staff

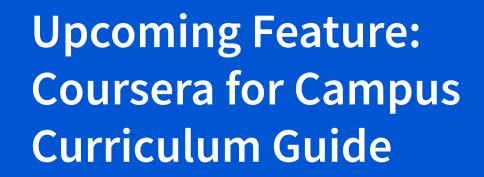
To date, approximately 85% of Covenant students have completed at least one course on Coursera, while 50% have completed two courses or more. Satisfaction with the online learning platform is building rapidly as more students become familiar with it.

"Coursera is amazing," says student Jedidiah Adesoji. "I've taken filmmaking, communication, and creativity courses,

and each one has challenged me and broadened my horizons. The experiences make me want to learn even more."

Fellow student Ode-irri Oghenekpaome agrees, adding: "I particularly enjoy the peer-to-peer learning aspects of Coursera because when I read other people's work, I see mistakes I've made in mine, and that heightens my awareness and knowledge. Overall, I feel a great sense of achievement every time I complete a course and earn a certificate."

For the next school year, Covenant aims to increase the uptake of Coursera further, with the goal that all students will take 30% of their courses through Coursera.



### **Upcoming Curriculum Integration Features from Coursera**

For universities and colleges looking to integrate Coursera content more deeply into their curriculum, Coursera will be releasing several features to help them do so.<sup>37</sup> The first of these features will provide universities and colleges recommendations on which courses to offer for credit by academic discipline, allowing them to fill skills gaps in their curriculum.

These recommendations are made based on data science-matching algorithms as well as our Skills Transformation team's analysis of top-rated and most popular courses, making it very easy for department heads to seamlessly pick and choose courses that best fit their needs.

To learn more about how Coursera for Campus can help your institution achieve strategic goals like driving student employability, please <u>contact us</u>.



#### Conclusion

Enriching existing curricula with online learning is not only vital for equipping students with job-relevant skills, but is also what they prefer as a learning experience. A recent Cengage survey found that 68% of U.S. students<sup>38</sup> are interested in taking courses offering a combination of in-person and online instruction. Similarly, a European Commission's survey found that 71% of participants think that digital learning tools and platforms work very well.<sup>39</sup>

Traditional curricula are complex, and overhauling them is costly and time-consuming.<sup>40</sup> By utilizing mappings, such as the ones presented above, universities and colleges may also save time and money on course design, implementation, and staff hiring.<sup>41</sup>

Transitioning to digital learning offers supplementary, but tangible, benefits in addition to augmenting existing course catalogs. It can acquaint students with digital communication and project management tools such as Zoom, Slack, and others, which many universities use, and which students will be expected to use at future jobs. Students can also develop workplace skills relevant in today's work environment such as online collaboration, critical thinking, vetting online research and datasets, and communicating effectively with remote team members.

By understanding which courses and modules are trending, Coursera can help universities and colleges in building the right coursework that prepares their students for the future of work.



### **Endnotes**

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#### **Endnotes**

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