



Certificate of Competency

This certificate is awarded to

Tzuchieh Chao

for demonstrating competence in the completion of
Fundamentals of Deep Learning

A handwritten signature in black ink, appearing to read "Greg Estes".

Greg Estes

Vice President, NVIDIA

Issue Date: : 11月 21, 2024

Certification ID: cWkvAwWNRA2OZ6Hqkf4AGQ |



Supply Chain Foundations

Course completed by Tzu-Chieh(Jeremy) Chao
Mar 17, 2025 at 07:19PM UTC • 1 hour 48 minutes

Top skills covered

Supply Chain Management

A handwritten signature in black ink that reads "Shea Hanson".

Shea Hanson, Head of Learning Content Strategy

Certificate ID: d62567e313e0b277d45f229871c3dae145f3212bfe15821743b86da8c066c601





Business Process Improvement

Course completed by Tzu-Chieh(Jeremy) Chao

Jan 15, 2026 at 05:34AM UTC • 58 minutes

Top skills covered

Business Process Improvement

A handwritten signature in black ink that reads "Shea Hanson".

Shea Hanson, Head of Learning Content Strategy

Certificate ID: 91fad10df3436a48a85b8bacc58150e521097bca99a254514e3d2036545216f6





Practical A/B Testing

Course completed by Tzu-Chieh(Jeremy) Chao
Jan 19, 2026 at 11:27PM UTC • 47 minutes

Top skills covered

A/B Testing

A handwritten signature in black ink that reads "Shea Hanson".

Shea Hanson, Head of Learning Content Strategy

Certificate ID: b379804d6d26bd6a0fad7214952e2a952f599981c6f1f535398alea675a375bd





Has fulfilled the requirements
established by the NextEra Energy
Corporate Quality Program



Nicole Dags
Executive Vice President,
Human Resources and Corporate
Services



4 Courses

Divide and Conquer, Sorting and Searching, and Randomized Algorithms

Graph Search, Shortest Paths, and Data Structures

Greedy Algorithms, Minimum Spanning Trees, and Dynamic Programming

Shortest Paths Revisited, NP-Complete Problems and What To Do About Them

Stanford ONLINE

Dec 6, 2023

TZU-CHIEH CHAO

has successfully completed the online, non-credit Specialization

Algorithms

In this specialization, learners developed a fundamental understanding algorithms and data structures. Learners studied general algorithm design paradigms and their applications, including divide-and-conquer, greedy methods, and dynamic programming; how to use data structures; and how to recognize and tackle NP-hard problems. Learners completed quizzes and programming assignments, and took an exam for each course. Some online courses may draw on material from courses taught on-campus but they are not equivalent to on-campus courses. This statement does not affirm that this participant was enrolled as a student at Stanford university in any way. It does not confer a Stanford university grade, course credit or degree, and it does not verify the identity of the participant.

Tim Roughgarden
Associate Professor of
Computer Science
Stanford University

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of the learner.

Verify this certificate at:
<https://coursera.org/verify/specialization/2E3Y8999ARGM>



3 Courses

Relational Database Design

The Structured Query Language (SQL)

Advanced Topics and Future Trends in Database Technologies



University
of Colorado
Boulder

Dec 12, 2023

TZU-CHIEH CHAO

has successfully completed the online, non-credit Specialization

Databases for Data Scientists

In this specialization learners developed essential skills about relational databases, including relational database design, database software fundamentals, and how to use the Structured Query Language (SQL) to work with databases. The specialization also introduced advanced topics in the field, such as database administration, data warehouse, big data, and NoSQL. Learners completed multiple projects to apply their new knowledge and skills.



Di Wu
Instructor
Data Science



Alan Paradise
Teaching Professor
Computer Science

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Verify this certificate at:

<https://coursera.org/verify/specialization/Z6J6JPELM7WS>



3 Courses

Probability Theory:
Foundation for Data Science

Statistical Inference for
Estimation in Data Science

Statistical Inference and
Hypothesis Testing in Data
Science Applications



University
of Colorado
Boulder

Nov 10, 2023

TZU-CHIEH CHAO

has successfully completed the online, non-credit Specialization

Data Science Foundations: Statistical Inference

This program is designed to provide the learner with a solid foundation in probability theory in preparation for the broader study of statistics. It will also introduce the learner to the fundamentals of statistics and statistical theory and will equip the learner with the skills required to perform fundamental statistical analysis of a data set in the R programming language.

Lane Dougherty 

S. N. Chao

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of the learner.

Verify this certificate at:

<https://coursera.org/verify/specialization/VCYKVYAVBX6>



Nov 26, 2023

TZU-CHIEH CHAO

has successfully completed

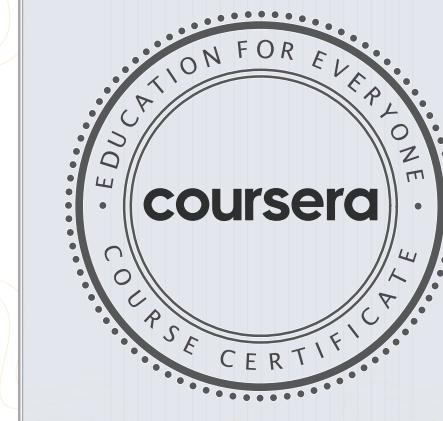
Operations Research (1): Models and Applications

an online non-credit course authorized by National Taiwan University and offered through Coursera

A handwritten signature in black ink, appearing to read "孔令傑" followed by "Ling-chieh Chao".

孔令傑 Ling-Chieh Kung
副教授 Associate Professor
資訊管理學系 Department of Information Management

COURSE CERTIFICATE



Verify at:
<https://coursera.org/verify/V4MRXJPEP6MA>

Coursera has confirmed the identity of this individual and their participation in the course.



Nov 30, 2023

TZU-CHIEH CHAO

has successfully completed

Operations Research (2): Optimization Algorithms

an online non-credit course authorized by National Taiwan University and offered through Coursera

A handwritten signature in black ink, appearing to read "孔令傑" followed by "Ling-Chieh".

孔令傑 Ling-Chieh Kung
副教授 Associate Professor
資訊管理學系 Department of Information Management

COURSE
CERTIFICATE



Verify at:
<https://coursera.org/verify/WK3KQ459F4H4>

Coursera has confirmed the identity of this individual and their participation in the course.



國立臺灣大學
National Taiwan University

Dec 14, 2023

TZU-CHIEH CHAO

has successfully completed

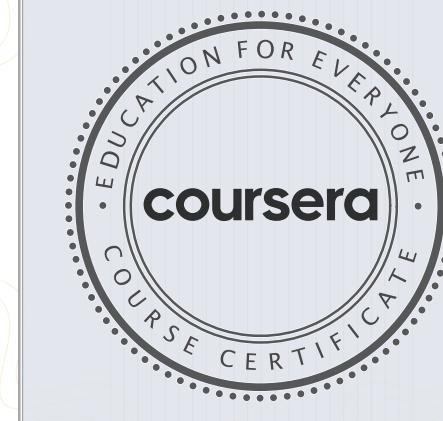
Operations Research (3): Theory

an online non-credit course authorized by National Taiwan University and offered through Coursera

孔令傑 Lynnng

孔令傑 Ling-Chieh Kung
副教授 Associate Professor
資訊管理學系 Department of Information Management

COURSE
CERTIFICATE



Verify at:
<https://coursera.org/verify/MSM43N5RQE8>

Coursera has confirmed the identity of this individual and their participation in the course.



NATIONAL TAIWAN UNIVERSITY

CERTIFICATE OF COURSE COMPLETION

Ref. No. 3430263

This is to certify that CHAO TZU CHIEH (趙子絜) has successfully completed the Intermediate Python Programming course at the Information System Training Program of Department of Computer Science and Information Engineering, National Taiwan University, Taipei, Taiwan, R.O.C. For the record, this course is offered without any course credit of National Taiwan University, in compliance with Implementation Regulations Governing Colleges Continuing Education, Ministry of Education.

GIVEN UNDER MY HAND AND SEAL of National Taiwan University in Oct. 2021.

A blue ink signature of Hsin-Mu Tsai.

Hsin-Mu Tsai, Director
Information System Training Program

A blue ink signature of Shih-Hao Hung.

Shih-Hao Hung, Chairman
Department of Computer Science and Information Engineering

A blue ink signature of Yao-Wen Chang.

Yao-Wen Chang, Dean
College of Electrical Engineering & Computer Science

A blue ink signature of Chung-Ming Kuan.

Chung-Ming Kuan, President
National Taiwan University



NATIONAL TAIWAN UNIVERSITY

CERTIFICATE OF COURSE COMPLETION

Ref. No. 3330167

This is to certify that CHAO TZU CHIEH (趙子絜) has successfully completed the Python Programming course at the Information System Training Program of Department of Computer Science and Information Engineering, National Taiwan University, Taipei, Taiwan, R.O.C. For the record, this course is offered without any course credit of National Taiwan University, in compliance with Implementation Regulations Governing Colleges Continuing Education, Ministry of Education.

GIVEN UNDER MY HAND AND SEAL of National Taiwan University in Sep. 2020.

A blue ink signature of Hsin-Mu Tsai, Director of the Information System Training Program.

Hsin-Mu Tsai, Director
Information System Training Program

A blue ink signature of Shih-Hao Hung, Chairman of the Department of Computer Science and Information Engineering.

Shih-Hao Hung, Chairman
Department of Computer Science and Information Engineering

A blue ink signature of Yao-Wen Chang, Dean of the College of Electrical Engineering & Computer Science.

Yao-Wen Chang, Dean
College of Electrical Engineering & Computer Science

A blue ink signature of Chung-Ming Kuan, President of National Taiwan University.

Chung-Ming Kuan, President
National Taiwan University