



**NANYANG  
TECHNOLOGICAL  
UNIVERSITY**  
SINGAPORE

# **CENTRE FOR PROFESSIONAL AND CONTINUING EDUCATION**

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Embrace Lifelong Learning | Grow with PaCE@NTU



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**JUL > DEC  
2021**  
COURSE CALENDAR

# ABOUT US

Drawing upon NTU's world-renowned faculty and strong industrial connections to develop quality content, PaCE@NTU offers a wide range of programmes and courses for working professionals that are curated from various disciplines, and conducted via different learning platforms. By offering short courses to semester-long courses, PaCE@NTU aims to equip professionals, managers, executives and technicians (PMETs) with cutting edge knowledge and skills to keep pace with the rapid technological changes in today's increasingly competitive economy and industrial landscape.

PaCE@NTU plays a crucial coordinating role between SkillsFuture Singapore, the Ministry of Education and various NTU's entities in promoting CET and lifelong learning. The centre currently administers the Part-Time Bachelor of Engineering degree programmes in Electrical and Electronic Engineering, Mechanical Engineering and Computer Science, credit-bearing courses stackable to Specialist or Graduate, as well as Seminars and Short Courses for the PMETs.

In addition, the centre offers Regional Executive Programmes to provide industry leaders with networking opportunities, Student Immersion Programmes\* for students to learn while experiencing the Singapore culture, and In-house Training programmes to meet clients' organisational learning needs.

*\* Student Immersion Programmes are currently not available due to COVID-19.*



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# NTU ALUMNI COURSE CREDITS

## UTILISE YOUR S\$1,600 TODAY

All NTU/NIE alumni will each receive S\$1,600 course credits, which can be utilised to copy up to 50% of the nett fee payable for courses offered by NTU-Continuing Education Training (CET) Units, including Centre for Professional and Continuing Education (PaCE@NTU).

### NTU Class of 2020 and NTU Class of 2021

All undergraduates who graduated in 2020 and 2021 will receive an additional S\$1,600 bonus alumni course credits in addition to the existing S\$1,600 course credits. These course credits can be utilised to offset the full course fees (inclusive of prevailing GST) payable for courses offered by NTU's CET units.



Apply our courses  
with your alumni  
course credits  
**NOW**

Click or Scan QR for more details

*\*Terms and conditions apply.*

## COURSE FEE SUPPORT

### Funding

SKILLSfuture SG

SSG and SkillsFuture Series (SFS)

**70% - 90%**  
of course fee

UTAP  
Union Training Assistance Programme

**50% - 75%**  
funding  
for unfunded course fee,  
capped at S\$250

Silver  
NATIONAL  
ACADEMY

**50%**  
of course fee

For more information on funding, please click [here](#).

### SkillsFuture Credit (SFC)

Singaporeans aged 25 and above may use your credits to pay for or offset NTU-CET course fees by applying for claim(s) starting January 2016. For more information on SFC, please click [here](#).

*\*Terms and conditions apply.*

### NTU SGUnited Mid-Career Pathways Programme - Company Training (SGUP-CT)

If you are a mid-career individual looking to boost your employability and/or to gain industry-relevant experience, the SGUnited Mid-Career Pathways Programme - Company Training is for you. The programme provides mid-career individuals with training opportunities through **6 to 12-month training programme developed and delivered by reputable companies.**

Course fee for this programme is **highly subsidised to a nett fee of S\$500**, and trainees may utilise their SkillsFuture Credit to offset the course fee. **Trainees will also receive a monthly training allowance of S\$1,500\* per month from SkillsFuture Singapore (SSG)** for the duration of the programme to cover their basic subsistence expenses.

For more information and the programme, please click [here](#).

*\* Subject to eligibility criteria*

### SGUnited Skills Programme (SGUS)

PaCE@NTU offers NTU SGUnited Skills Programme for jobseekers impacted by the economic consequences of COVID-19. **It is a full-time, 6 to 9-month training programme** developed to help trainees in acquiring industry-relevant skills to enhance their employability and access job opportunities in this current economic climate.

Course fee for this programme is **highly subsidised to a nett fee of S\$500**, and trainees may utilise their SkillsFuture Credit to offset the course fee. **Trainees will also receive a monthly training allowance of S\$1,200\* per month from SkillsFuture Singapore (SSG)** for the duration of the programme to cover their basic subsistence expenses.

For more information and list of programmes, please click [here](#).

## ACCOUNTING & FINANCE

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
A1	Accounting & Finance for Advanced Manufacturing	\$834.60	2		19 - 20		14 - 15		9 - 10
A2	Maximize Cash Flow in Business	\$1,284.00	2	15 - 16		16 - 17 (VL)		18 - 19	
A3	Practical Business Finance for Engineering and Non-Financial Executives (VL)	\$1,284.00	2		26 - 27			25 - 26	

## CYBERSECURITY

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
B1	Nexusguard Certified Pentester (NCP) Course (VL)	\$10,700.00	21	5 - 30		6 - 10		2 - 26	
B2	Cloud Computing Security and Compliance 101	\$834.60	2			23 - 24			9 - 10
B3	Preparing for Cybersecurity	\$834.60	2						2 - 3

## DATA ANALYTICS

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
C1	Data Analysis and Analytics - Practical Application (VL)	\$1,498.00	2		5 - 6	7 - 8	12 - 13	9 - 10	
C2	Data Analysis and Forecasting - Practical Application (NEW)				11 - 13	22 - 24		17 - 19	
C3	Data Analytics and Market Sensing (VL)	\$834.60	2	1 - 2			5 - 6		
C4	Data and Information Sources in Analytics	\$1,284.00	2		24 - 25			30 Nov to 1 Dec	
C5	Data Management, Governance and Compliance (NEW)				19 - 20		21 - 22	25 - 26	9 - 10
C6	Leveraging Data Analytics for Sales & Marketing	\$1,284.00	2				26 - 27		14 - 15
C7	Market Sensing Tools and Approaches - Practical Application	\$1,498.00	2			28 - 29			7 - 8
C8	Maximising Business Value through Understanding Digital Transformation (VL)	\$749.00	1	15		02	14		02
C9	NTU-FTA Series - Artificial Intelligence and Machine Learning (VL)	\$642.00	1	29	26	23			
C10	NTU-FTA Series - Applying AI Bots In Education (VL)	\$642.00	1	21	18	22			
C11	NTU-FTA Series - Big Data and Data Analytics (VL)	\$642.00	1	06	03	07			
C12	NTU-FTA Series - Big Data and Data Analytics in Education (VL)	\$642.00	1	26	23	27			

## HEALTHCARE

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
D1	Basic Orthopaedic Biomechanics - Part I (VL)	\$1,123.50	1	Please refer to our website for the latest course dates					
D2	Basic Orthopaedic Biomechanics - Part II (VL)	\$1,123.50	1.5	30 - 31					
D3	Health Coaching for Older Adults	\$1,284.00	2	1 - 2	19 - 20				

## URBAN SOLUTIONS

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
E1	Principles and Fundamentals of Asset and Facilities Management	\$749.00	1	19			18		

## FINTECH

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
F1	Cryptography and Cryptocurrencies: The money of the future (VL)	\$642.00	1		05				
F2	NTU-FTA Series - Enterprise Blockchain (VL)	\$642.00	1	13	10	14			
F3	NTU-FTA Series - FinTech & Innovation (VL)	\$642.00	1	05	02	06			

## DIGITAL MEDIA

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
G1	A Practical Introduction to Augmented Reality	\$417.30	1			22			06
G2	Media Management	\$631.30	2			15 - 16			
G3	A Practical Approach: Leveraging on Internet of Things (IoT) to improve business productivity (NEW)	\$1,926.00	2		5 - 6		14 - 15		
G4	Digital Marketing - A Practical Approach to Search Engine Marketing (Google Ads) (VL)	\$1,498.00	2		5 - 6	2 - 3	21 - 22		16 - 17
G5	Digital Marketing - A Practical Approach to Search Engine Optimization (SEO) (VL)	\$1,498.00	2	15 - 16	26 - 27		7 - 8		2 - 3
G6	Digital Marketing - Content Creation for Marketing (VL)	\$1,498.00	2	22 - 23		9 - 10	28 - 29		9 - 10
G7	Digital Marketing - Delivering Results in the Digital Age	\$2,247.00	3	28 - 30		29 Sep - 1 Oct		10 - 12	
G8	Digital Marketing - Gaining Customer Insights with Digital Marketing Analytics!	\$1,498.00	2	13 - 14	12 - 13	27 - 28		18 - 19	
G9	Digital Marketing - Tapping into the power of Social Media marketing (VL)	\$1,498.00	2		19 - 20			25 - 26	
G10	Digital Marketing - The Power of LinkedIn Marketing! (VL)	\$749.00	1	1	6	23		5	
G11	The Power of Advance Google Analytics: Deepen Your Insights with Consumer Data (GAIQ) (NEW)				26 - 27		28 - 29		

## ENGINEERING

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
H1	Applied HAZOP for Engineers (PDU)	\$834.60	2						16 - 17
H2	Applying Lean in a Digital Economy	\$1,247.00	3	Please refer to our website for the latest course dates					
H3	ARM Processor for Embedded IoT System: Architecture, Interfacing and Programming	\$2,568.00	3	8 - 9					
H4	Corrosion Engineering (NEW) (PDU)		2	5 - 6			4 - 5		
H5	Establish Lean Six Sigma Methodology	\$1,717.35	5	Please refer to our website for the latest course dates					
H6	Gears - Definition, Manufacturing, Control and Implementation (NEW) (PDU)				4 - 5				
H7	Gear Failures and Tribology of Gears (NEW) (PDU)			13 - 14					1 - 2
H8	Failure and Damage Mechanisms of Pressurized Equipment (NEW) (PDU)	\$2,889.00	3	26 - 28			25 - 27		
H9	Failure Analysis of Shafts, Gears and Bearings (NEW) (PDU)	\$2,889.00	3	29 Jun - 1 Jul				9 - 11	
H10	Forensic Engineering Investigation (NEW) (PDU)	\$1,926.00	2				27 - 28		
H11	Geometric Dimensioning & Tolerancing	\$1,717.35	5						13 - 20
H12	Laser Machining and 3D Printing for Industry	\$802.50	1	Please refer to our website for the latest course dates					
H13	SG101 - ABB Robotics Operator Training (NEW)	\$2,568.00	2	5 - 6	2 - 3	6 - 7			
H14	SG102 - ABB Robotics Programming Training (NEW)	\$3,852.00	3	7 - 9	4 - 6	8 - 10			
H15	SG103 - ABB Robotstudio Training (NEW)	\$3,852.00	3	14 - 16	11 - 13	15 - 17			
H16	SG104 - ABB Electrical and Mechanical Troubleshooting (NEW)	\$3,852.00	3	21 - 23	18 - 20	22 - 24			
H17	Tolerance Stackup and Analysis in Mechanical Design	\$1,809.37	5					23 - 30	

## EDUCATION

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
I1	STEMIE Invention Professional Development for Pre-U Educators	\$1,926.00	3		11 - 13	8 - 10		10 - 12	
I2	NTU-FTA Series - FinTech for Educators (VL)	\$642.00	1	14	11	08			
I3	Health Coaching for Older Adults	\$1,284.00	2	1 - 2	19 - 20		14 - 15		2 - 3

## BUSINESS & COMMUNICATION

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
J1	<a href="#">Advanced Business Presentation (VL)</a>	\$1,284.00	2		30 - 31			25 - 26	
J2	<a href="#">Effective People &amp; Team Performance Management for Non-HR Managers</a>	\$631.30	2	22 - 23					
J3	<a href="#">Project Management Appreciation (NEW)</a>	\$631.30	1		26 - 27			22 - 23	

## TECH-ENABLED SERVICES & INTELLIGENCE SYSTEMS

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
K1	<a href="#">Managing a Smart City with Business Intelligence</a>	\$834.60	2	29 - 30		23 - 24			
K2	<a href="#">Measurement and Sensing Systems</a>	\$1,498.00	2				5 - 6	16 - 17	
K3	<a href="#">NTU-FTA Series - Cloud and API Economy (VL)</a>	\$642.00	1	28	25	29			
K4	<a href="#">NTU-FTA Series - Payments, Digital Currencies and Cashless Economies (VL)</a>	\$642.00	1	23	27	24			
K5	<a href="#">Robot Motion Planning and Control</a>	\$1,498.00	2				12 - 13	23 - 24	

## IT & INFORMATION STUDIES

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
L1	<a href="#">Application of Design Innovation (DI) for Blockchain</a>	\$1,926.00	3	28 - 30					
L1	<a href="#">5G-Based Localization Methods (VL) (NEW)</a>	\$749.00	1			24			23
L2	<a href="#">Blockchain and Hashgraph: Technology Development and Business Applications for Industry 4.0 (VL)</a>	\$749.00	1	23					

## FOOD SAFETY AND TECHNOLOGY

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
M1	<a href="#">Developing an Innovative Food Business Ecosystem with Global Presence</a>	\$1,284.00	2			Please refer to our website for the latest course dates			

## INDUSTRY 4.0 & ADVANCED MANUFACTURING

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
N1	<a href="#">3D Printing for Advanced Metallic Products - Basic (VL) (NEW)</a>	\$1,926.00	2						6 - 7
N2	<a href="#">3D Printing of Advanced Metallic Products - Intermediate (VL) (NEW)</a>	\$1,926.00	2						20 - 21
N3	<a href="#">3D Printing of Advanced Polymer Products: Essentials of Polymer Printing (Basic)</a>	\$1,712.00	2	Please refer to our website for the latest course dates					
N4	<a href="#">3D Printing of Electronics and Sensors</a>	\$1,498.00	2			30 Sep to 1 Oct			
N5	<a href="#">3D Printing of Medical Devices and Tissues for the Future of Healthcare</a>	\$1,712.00	2	Please refer to our website for the latest course dates					
N6	<a href="#">An Introduction to Electrical Power Systems Engineering (VL)</a>	\$1,926.00	3	Please refer to our website for the latest course dates					
N7	<a href="#">Design for Assembly in Manufacturing</a>	\$1,625.00	4			20 - 24			
N8	<a href="#">Design for Sustainability</a>	\$834.60	2					29 - 30	
N9	<a href="#">Digital Transformation Through Process Automation - RPA</a>	\$749.00	1	Please refer to our website for the latest course dates					
N10	<a href="#">Intelligent Automation</a>	\$749.00	1					16	
N11	<a href="#">NTU-FTA Series - IoT (VL)</a>	\$642.00	1	09	13	10			
N12	<a href="#">Top AI Skills to Learn - Computational Thinking &amp; programming (Basic) (VL)</a>	\$642.00	1	Please refer to our website for the latest course dates					
N13	<a href="#">Top AI Skills to Learn - Machine Learning</a>	\$642.00	1		06		01		17
N14	<a href="#">Top AI Skills to Learn - Natural Language Processing (NLP)</a>	\$642.00	1	Please refer to our website for the latest course dates					
N15	<a href="#">Transformative Technology and Processes</a>	\$1,498.00	2					23 - 24	

## LEADERSHIP & PROFESSIONAL DEVELOPMENT

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
01	Achieving Excellence in Technical Writing	\$1,284.00	2	Please refer to our website for the latest course dates					
02	Achieving Peak Performance with Mental Skills, Emotional Strength & Team Approach (VL)	\$631.30	2				28 - 29		
03	Achieving the Psychological Advantage in Leadership (VL)	\$631.30	2		26 - 27				
04	Advanced Negotiation Skills in Business Applications (VL)	\$1,284.00	2			6 - 7			14 - 15
05	Advanced Project Management Development Process (PMDP) for New Build (VL)	\$749.00	1		16			17	
06	Art of Saying No to Customers Without Offending Them	\$631.30	2	Please refer to our website for the latest course dates					
07	Crisis Communications - Managing Digital and Social Media	\$1,284.00	2					22 - 23	
08	Creativity thru Design Thinking Skills in the Digital Economy (VL)	\$642.00	1	21				05	
09	Critical Thinking for Innovation in Enterprises (VL)	\$631.30	2	29 - 30		8 - 9		18 - 19	
010	Cryptography for Managers & Non-Techies (NEW)	\$749.00	1		05				
011	Design Thinking for Problem Solving and Innovation: Achieve Breakthrough Solutions (VL)	\$1,284.00	2	22 - 23			21 - 22		7 - 8
012	Design Thinking Workshop	\$642.00	1	07	04	08	06	10	08
013	Digital Transformation for Strategic Competitiveness	\$1,498.00	2				14 - 15		
014	Key Emotional Competence for Managers	\$631.30	2	21 - 22					
015	Leading Beyond Managing (NEW)	\$631.30	2						9 - 10
016	Leading Strategic Design and Innovation	\$1,498.00	2					15 - 16	
017	Negotiation Skills in Business Applications (VL)	\$642.00	1			13		18	
018	Strategic Thinking & Dynamic Management	\$1,284.00	2		18 - 19				
019	Stay Calm and Stand Up: Becoming more assertive in the workplace	\$631.30	2			23 - 24			
020	Strategic Operations Leadership	\$631.30	2	29 - 30					
021	The Art of Managing People	\$631.30	2			6 - 7		29 - 30	
022	Tough Problem Solving Through Systems Thinking	\$631.30	2			23 - 24			
023	Warrior or Worrier? Conflict Resolution and Stress Management Strategies	\$631.30	2				7 - 8		

## ENTREPRENEURSHIP

NO	COURSE TITLE	FEES	DAYS	JUL	AUG	SEP	OCT	NOV	DEC
P1	An Interactive Workshop on Inventory Management	\$1,284.00	2	Please refer to our website for the latest course dates					
P2	Effective Counselling Skills	\$631.30	2		5 - 6				
P3	From Strategy to Action	\$631.30	2			2 - 3			
P4	Innovating for Results	\$631.30	2	8 - 9			7 - 8		
P5	Innovation & Entrepreneurship: Generating and protecting business ideas to planning and launching the actual business	\$1,284.00	2			27 - 28			
P6	Mastering Sales & Operations Planning (S&OP) – An interactive and experiential learning program (VL)	\$1,926.00	2	Please refer to our website for the latest course dates					
P7	Creating New Ventures in Asia (NEW)	\$1,498.00	2	13 - 14		14 - 15		16 - 17	

### (VL) VIRTUAL LEARNING

Short courses stated VL will be conducted in Synchronous and/or Asynchronous e-Learning. Participants will be guided on how to access the e-learning/online classroom and partake in group discussions/activities/course consultation.

#### Note:

- Mode of training may be subject to change. Please refer to our website for the latest information.
- Fees stated are before funding and inclusive of 7% GST.



Click or Scan QR for more details and to register.

## SPECIALIST CERTIFICATE COURSES

Specialist Certificate comprises credit-bearing courses that can be taken as stackable standalone courses and are from NTU Undergraduate Degree Programmes.

COURSE CODE	COURSE TITLE	FEES
<b>SPECIALIST CERTIFICATE IN CIVIL INFRASTRUCTURE ^</b>		
CV2014	<a href="#">Geotechnical Engineering</a>	\$3,113.70
CV3011	<a href="#">Reinforced Concrete Design</a>	\$3,113.70
CV3012	<a href="#">Steel Design</a>	\$3,113.70
CV3016	<a href="#">Construction Technology &amp; Processes</a>	\$3,113.70
<b>SPECIALIST CERTIFICATE IN CYBER SECURITY</b>		
CZ4024	<a href="#">Cryptography and Network Security</a>	\$2,956.41
CZ4062	<a href="#">Computer Security (System Security)</a>	\$2,956.41
CZ4064	<a href="#">Security Management</a>	\$2,956.41
CZ4067	<a href="#">Software Security</a>	\$3,113.70
CZ4069	<a href="#">Concepts and Techniques for Malware Analysis</a>	\$3,113.70
<b>SPECIALIST CERTIFICATE IN DATA SCIENCE</b>		
CZ4032	<a href="#">Data Analytics and Mining</a>	\$2,956.41
CZ4041	<a href="#">Machine Learning</a>	\$2,956.41
CZ4062	<a href="#">Computer Security (System Security)</a>	\$2,956.41
CZ4071	<a href="#">Network Science</a>	\$2,956.41
<b>SPECIALIST CERTIFICATE IN ELECTRICAL POWER SYSTEMS</b>		
EE2001	<a href="#">Circuit Analysis</a>	\$2,011.60
EE3010	<a href="#">Electrical Devices and Machines</a>	\$1,444.50
EE3015	<a href="#">Power Systems and Conversion</a>	\$1,444.50
<b>SPECIALIST CERTIFICATE IN FOOD CHEMISTRY</b>		
CM9101	<a href="#">Food Chemistry and Analysis</a>	\$3,113.70
CM9102	<a href="#">Food Analysis and Safety</a>	\$3,113.70
CM4013	<a href="#">Current Topics in Analytical Chemistry</a>	\$3,113.70

COURSE CODE	COURSE TITLE	FEES
<b>SPECIALIST CERTIFICATE IN INTELLIGENT SYSTEMS</b>		
CZ3005	<a href="#">Artificial Intelligence</a>	\$2,956.41
CZ4041	<a href="#">Machine Learning</a>	\$2,956.41
CZ4042	<a href="#">Neutral Networks and Deep Learning</a>	\$2,956.41
CZ4046	<a href="#">Intelligent Agents</a>	\$2,956.41
<b>SPECIALIST CERTIFICATE IN MANUFACTURING ENGINEERING</b>		
MA2004	<a href="#">Manufacturing Processes</a>	\$1,444.50
MA4842	<a href="#">Engineering Metrology</a>	\$1,444.50
MA4853	<a href="#">Manufacturing Systems</a>	\$1,444.50
<b>SPECIALIST CERTIFICATE IN MECHANICAL ENGINEERING ESSENTIALS FOR AEROSPACE ENGINEERS #</b>		
MA2002	<a href="#">Theory of Mechanism</a>	\$1,508.70
MA2009	<a href="#">Introduction to Electrical Circuits &amp; Electronic Devices</a>	\$1,508.70
MA3001	<a href="#">Machine Element Design</a>	\$1,508.70
MA4002	<a href="#">Fluid Dynamics</a>	\$1,508.70
<b>SPECIALIST CERTIFICATE IN POWER AND CLEAN ENERGY</b>		
EE4504	<a href="#">Design of Clean Energy Systems</a>	\$963.00
EE4532	<a href="#">Power Electronics and Drives</a>	\$1,444.50
EE4534	<a href="#">Modern Distribution Systems with Renewable Resources</a>	\$1,444.50
<b>SPECIALIST CERTIFICATE IN SOFTWARE BASICS II</b>		
CZ2101	<a href="#">Algorithm Design and Analysis</a>	\$1,444.50
CZ2002	<a href="#">Object Oriented Design and Programming</a>	\$1,444.50
CZ2005	<a href="#">Operating Systems</a>	\$1,444.50
CZ2006	<a href="#">Software Engineering</a>	\$1,444.50

^ Enable NTU's Environmental Engineering graduates to apply for registration as Professional Engineers (Civil).

# Enable NTU's Aerospace Engineering graduates to apply for registration as Professional Engineers (Mechanical).



## SPECIALIST CERTIFICATE COURSES

To be awarded a Specialist Certificate from the list below, learners must complete minimum 9AUs worth of courses. Learners who completed all courses will earn the Advanced Specialist Certificate.

COURSE CODE	COURSE TITLE	FEES
<b>SPECIALIST CERTIFICATE IN BIOLOGICAL DATA SCIENCE / ADVANCED BIOLOGICAL DATA SCIENCE</b>		
BS0004	<a href="#">Introduction to Data Science</a>	\$3,210.00
BS1008	<a href="#">Biostatistics</a>	\$3,210.00
BS1009	<a href="#">Introduction to Computational Thinking</a>	\$3,210.00
BS3008	<a href="#">Computational Biology and Modeling</a>	\$3,210.00
BS3349	<a href="#">(UAEB) Workshop (Series II) - Introduction to R Programing</a>	\$3,210.00
BS4017	<a href="#">High-Throughput Bioinformatics</a>	\$3,210.00
<b>SPECIALIST CERTIFICATE IN HEALTH AGING / ADVANCED HEALTH AGING</b>		
BS0005	<a href="#">One Health</a>	\$3,210.00
BS1200	<a href="#">Understanding Singapore Healthcare System</a>	\$3,210.00
BS2024	<a href="#">Evolution in Health and Disease</a>	\$3,210.00
BS3028	<a href="#">Natural Products in Medicinal Chemistry</a>	\$3,210.00
BS4018	<a href="#">Biology of Aging and Neurodegeneration</a>	\$3,210.00
BS8001	<a href="#">Human Body Function and Disease</a>	\$3,210.00

COURSE CODE	COURSE TITLE	FEES
<b>SPECIALIST CERTIFICATE IN STRUCTURAL BIOLOGY / ADVANCED STRUCTURAL BIOLOGY</b>		
BS2020	<a href="#">Mathematics, Physics and Basic Programming for the Structural Biologist</a>	\$3,210.00
BS2021	<a href="#">RNA Structures &amp; RNA Based Drug Development</a>	\$3,210.00
BS3004	<a href="#">Cancer Biology and Therapy</a>	\$3,210.00
BS3013	<a href="#">Drug Discovery and Development, Biotechnology</a>	\$3,210.00
BS3025	<a href="#">Nuclear Magnetic Resonance in Structural Biology</a>	\$3,210.00
BS3027	<a href="#">Spectroscopic Methods in Biomedical Structural Biology</a>	\$3,210.00
BS3344	<a href="#">Undergraduate Advanced Experimental Biology (UAEB) Workshop (Series II) - Macromolecular Crystallography</a>	\$3,210.00

These Specialist Certificates are designed for part-time CET diploma holders to gain admission to NTU part-time degree programmes.

COURSE CODE	COURSE TITLE	FEES
<b>SPECIALIST CERTIFICATE IN FOUNDATIONS OF COMPUTER SCIENCE</b>		
SC1003	<a href="#">Introduction to Computational Thinking and Programming</a>	\$1,508.70
SC1004	<a href="#">Linear Algebra for Computing</a>	\$3,113.70
SC1005	<a href="#">Digital Logic</a>	\$1,508.70
CZ2100	<a href="#">Probability and Statistics for Computing</a>	\$3,113.70
MH1812	<a href="#">Discrete Mathematics</a>	\$1,508.70
<b>SPECIALIST CERTIFICATE IN FOUNDATIONS OF ELECTRICAL AND ELECTRONIC ENGINEERING</b>		
EE1002	<a href="#">Physics Foundation for Electrical &amp; Electronic Engineering</a>	\$2,011.60
EE2001	<a href="#">Circuit Analysis</a>	\$2,011.60
EE2004	<a href="#">Digital Electronics</a>	\$2,011.60
MH2810	<a href="#">Mathematics A</a>	\$2,011.60
PH1012	<a href="#">Physics A</a>	\$2,011.60

COURSE CODE	COURSE TITLE	FEES
<b>SPECIALIST CERTIFICATE IN FOUNDATIONS OF MECHANICAL AND AEROSPACE ENGINEERING</b>		
MA1001	<a href="#">Dynamics</a>	\$1,508.70
MA2001	<a href="#">Mechanics of Materials</a>	\$1,508.70
MA2003	<a href="#">Introduction to Thermo-Fluids</a>	\$1,508.70
MH2810	<a href="#">Mathematics A</a>	\$2,011.60
PH1012	<a href="#">Physics A</a>	\$2,011.60

### NOTE:

1. Part-time CET diploma holders from local polytechnics are required to complete the preparatory module before applying for these specialist certificates. For enquiry, please email us at [askpt@ntu.edu.sg](mailto:askpt@ntu.edu.sg).
2. These courses can be taken individually.

## GRADUATE CERTIFICATE COURSES

Graduate Certificate comprises credit-bearing courses that can be taken as stackable standalone courses and are from NTU Postgraduate Degree Programmes. These courses cannot be stacked to MiniMasters™. To be awarded a Graduate Certificate, learners must complete minimum 9AUs worth of courses.

COURSE CODE	COURSE TITLE	FEES
<b>GRADUATE CERTIFICATE IN ANALYTICS</b>		
MH8101	<a href="#">Operation Research I</a>	\$2,808.75
MH8131	<a href="#">Probability and Statistics</a>	\$2,808.75
MH8141	<a href="#">Time Series Analysis</a>	\$2,808.75
MH8321	<a href="#">Statistical Modelling and Data Analysis</a>	\$2,808.75
MH8331	<a href="#">Financial &amp; Risk Analytics I</a>	\$2,808.75
MH8332	<a href="#">Financial &amp; Risk Analytics II</a>	\$2,808.75
<b>GRADUATE CERTIFICATE IN FINTECH ESSENTIALS</b>		
MH6811	<a href="#">Machine Learning in Finance</a>	\$5,350.00
MH8801	<a href="#">Introduction to FinTech</a>	\$2,675.00
MH8802	<a href="#">FinTech Ecosystem and Innovations</a>	\$2,675.00
MH8811	<a href="#">Python Programming</a>	\$2,675.00
MH8812	<a href="#">Python for Data Analysis</a>	\$2,675.00

COURSE CODE	COURSE TITLE	FEES
<b>GRADUATE CERTIFICATE IN ASSESSMENT IN EDUCATION (NEW)</b>		
MDP901	<a href="#">Social and Emotional Development and Assessment</a>	\$4,408.40
MPM909	<a href="#">Elementary Statistics for Education</a>	\$4,408.40
MSE915	<a href="#">Assessment of Children and Youth with Special Needs</a>	\$4,408.40
<b>GRADUATE CERTIFICATE IN TEACHING AND LEARNING OF DRAMA AND ART (NEW)</b>		
MDR903	<a href="#">The Teacher as Facilitator</a>	\$4,408.40
MEA902	<a href="#">Visual Arts and Creativity</a>	\$4,408.40
MEA903	<a href="#">Art and New Media Technology</a>	\$4,408.40
<b>GRADUATE CERTIFICATE IN UNDERSTANDING DIVERSE LEARNERS (NEW)</b>		
MEC901	<a href="#">Child Development (0-8 years)</a>	\$4,408.40
MHA901	<a href="#">Understanding Learners with High Ability and their Affective and Moral Needs</a>	\$4,408.40
MSE915	<a href="#">Assessment of Children and Youth with Special Needs</a>	\$4,408.40

## SPECIALIST AND GRADUATE CERTIFICATES COURSES (DATA CENTRE)

These certificates are developed in collaboration with Facebook and CBRE, aimed at training and upskilling local engineering talent to fill the increasing demand for specialists in the data centre industry. To be awarded a Specialist or Graduate Certificate, learners must complete minimum 9AUs worth of courses.

COURSE CODE	COURSE TITLE	FEES
<b>SPECIALIST CERTIFICATE IN DATA CENTRE (NETWORK ENGINEERING)</b>		
EE2010	<a href="#">Signals &amp; Systems</a>	\$4,151.60
EE3017	<a href="#">Computer Communications</a>	\$1,444.50
EE4001	<a href="#">Software Engineering</a>	\$3,113.70
EE4110	<a href="#">Optical Communication System Design</a>	\$2,075.80
EE4718	<a href="#">Enterprise Network Design</a>	\$2,075.80

COURSE CODE	COURSE TITLE	FEES
<b>SPECIALIST CERTIFICATE IN DATA CENTRE (SITE OPS)</b>		
CZ3005	<a href="#">Artificial Intelligence</a>	\$2,956.41
CZ4032	<a href="#">Data Analytics and Mining</a>	\$2,956.41
CZ4041	<a href="#">Machine Learning</a>	\$2,956.41
CZ4046	<a href="#">Intelligent Agents</a>	\$2,956.41
CZ4064	<a href="#">Security Management</a>	\$2,956.41

## SPECIALIST AND GRADUATE CERTIFICATES COURSES (DATA CENTRE)

COURSE CODE	COURSE TITLE	FEES
<b>SPECIALIST CERTIFICATE IN DATA CENTRE (DESIGN ENGINEERING)</b>		
EE1003	<a href="#">Introduction to Materials for Electronics</a>	\$3,113.70
EE2001	<a href="#">Circuit Analysis</a>	\$2,011.60
EE3010	<a href="#">Electrical Devices &amp; Machines</a>	\$1,444.50
EE3011	<a href="#">Modelling &amp; Control</a>	\$3,113.70
MA2001	<a href="#">Mechanics of Materials</a>	\$1,508.70
MA2003	<a href="#">Introduction to Thermo-Fluids</a>	\$1,508.70
MA2007	<a href="#">Thermodynamics</a>	\$3,113.70
MA4811	<a href="#">Psychrometry &amp; Air Conditioning</a>	\$3,113.70

COURSE CODE	COURSE TITLE	FEES
<b>SPECIALIST CERTIFICATE IN DATA CENTRE (FACILITIES OPS)</b>		
EE3015	<a href="#">Power Systems and Conversion</a>	\$1,444.50
EE4504	<a href="#">Design of Clean Energy Systems</a>	\$963.00
EE4534	<a href="#">Modern Distribution Systems with Renewable Resources</a>	\$1,444.50
EM9105	<a href="#">Energy Resources Management</a>	\$3,113.70
EM9107	<a href="#">Environmental Health and Safety Management</a>	\$3,113.70
<b>GRADUATE CERTIFICATE IN INTERNATIONAL CONSTRUCTION MANAGEMENT</b>		
CV6212	<a href="#">Construction Management</a>	\$3,223.91
CV6213	<a href="#">Construction Technology</a>	\$3,223.91
CV6216	<a href="#">Techniques of Project Planning &amp; Control</a>	\$3,223.91
CV6217	<a href="#">Information Technology in Construction</a>	\$3,223.91

## STANDALONE COURSES

Standalone Courses are credit-bearing courses from NTU Undergraduate and Postgraduate Degree Programmes.

COURSE CODE	COURSE TITLE	FEES
<b>UNDERGRADUATE COURSES</b>		
AB1201	<a href="#">Financial Management</a>	\$1,431.66
AB1202	<a href="#">Statistics and Analysis</a>	\$1,431.66
AD1102	<a href="#">Financial Accounting</a>	\$1,908.88
BG3105	<a href="#">Biomedical Instrumentation</a>	\$1,726.98
BG4313	<a href="#">Global Medical Device Regulatory Overview</a>	\$1,726.98
BU8101	<a href="#">Accounting: A User Perspective</a>	\$1,431.66
CH2107	<a href="#">Introduction to Computational Thinking</a>	\$1,726.98
CM8012	<a href="#">Introduction to Forensic Science</a>	\$2,075.80
CZ1106	<a href="#">Computer Organisation and Architecture</a>	\$1,726.98
CZ1007	<a href="#">Data Structures</a>	\$1,726.98
ET0001	<a href="#">Enterprise &amp; Innovation*</a>	\$477.22
GC0001	<a href="#">Sustainability: Seeing Through the Haze*</a>	\$575.66
HZ9101	<a href="#">Introduction to Creative Writing</a>	\$3,113.70

COURSE CODE	COURSE TITLE	FEES
<b>POSTGRADUATE COURSES</b>		
MA6081	<a href="#">Fundamentals of Project Management</a>	\$3,852.00
MA6082	<a href="#">Management of Project Plan, Schedule and Resources</a>	\$3,852.00
MA6083	<a href="#">Project Budget and Cost Management</a>	\$3,852.00
MA6084	<a href="#">Procurement and Contract Management in Projects</a>	\$3,852.00

\*Online Course



Click or Scan QR for more details and to register.

**Note:**  
- Fees stated are before funding and inclusive of 7% GST.

# PART-TIME BACHELOR OF ENGINEERING DEGREE PROGRAMMES

Earn a degree in **Computer Science (CS)**, **Electrical and Electronic Engineering (EEE)** or **Mechanical Engineering (ME)**. Our Part-time accredited engineering degree programmes are specially tailored for the working professionals who aspire to upskill and reskill through higher qualification while continuing to acquire work experience. The objective is to enhance individual's full potential through lifelong learning.

Upon attaining a Bachelor's Degree in EEE or ME, learners will be eligible to apply for registration as Professional Engineers (PE).

## WHY CHOOSE PART-TIME DEGREE PROGRAMMES

- Earn a degree without taking a break from your career
- Awarded the same degree as full-time students
- Flexible and Blended learning model
- Accredited by the Institute of Engineers (IES), the Singapore signatory of the Washington Accord, through its Engineering Accreditation Board (EAB)

### B.Eng Degree in Electrical and Electronic Engineering

Ranked 1st in Asia and 4th in the world, the School of Electrical and Electronic Engineering (EEE) moulds students into future-ready engineers who spark new discoveries in technology and innovation.

The NTU Part-time EEE programme keeps you competitive for the evolving market by deepening your knowledge and skills through hands-on experience.

### B.Eng Degree in Mechanical Engineering

Are you interested in the science of mechanics? Mechanical engineers use their knowledge in the design and manufacturing of high-tech products, as well as in the operation and maintenance of plant and machinery.

The NTU Part-time ME programme leverages active collaborative learning pedagogies to promote learning and teaching in both online and offline spaces. It aims to train professionals with a well-rounded education in engineering and technology.

### B.Eng Degree in Computer Science

NTU School of Computer Science and Engineering (SCSE) is a leading computer science and engineering school for higher learning that is known for its excellent curriculum.

The NTU Part-time CS programme is concerned with the efficient application of computer technology, through the design of software algorithms and data structures, design methodologies and language paradigms.

If you aspire to develop a professional career in computing, information processing, digital media or intelligent systems, this programme is for you.



*I chose NTU because I think it is suitable for polytechnic graduates. I found that NTU's modules complement the fundamental and practical lessons that I learned in polytechnic, the modules covered every aspect of mechanical engineering, which broadened my knowledge and helped me in my career.*



Lee Li Quan  
Honours (Highest Distinction),  
NTU Part-time Bachelor of Engineering Degree  
(Mechanical Engineering)

## Programme Intake and Application Period

New intake starts in August every year. Application starts in early December and closes in mid-February of the year.



Click or Scan QR for more details.

# MOBILE LEARNING COURSES

## INDUSTRY 4.0 SMART MANUFACTURING MOBILE LEARNING COURSES



### COURSE TITLE



[Data Analytics and Cyber-Physical System for Industry 4.0](#)



[Digitization and Connectivity for Advanced Manufacturing](#)



[Automation and Intelligence for Advanced Manufacturing](#)



[Security Considerations for Cyber-Physical Systems](#)



[How to implement Intelligence in Smart Factory?](#)

**NOTE:**

- An e-Certificate of Completion will be issued upon completion of each course
- Mobile Learning Courses are also compatible for use with desktop computer/laptop and tablet/iPad.
- SkillsFuture credit-eligible courses

For more information on funding, please click [here](#).

In Partnership with:  
**Delta-NTU Corporate Lab for Cyber-Physical Systems**

PaCE@NTU, in partnership with Delta-NTU Corporate Lab, proudly presents online training content to help professionals and enterprises learn and work within the changing landscape of manufacturing.

A complimentary one-time consultation session can be arranged with sign up of 6 participants or more from a local enterprise.

### Download DeltaKnew Academy

on your mobile now and learn about Smart Manufacturing courses on Industry 4.0 at your fingertips!



Scan QR code to download DeltaKnEW Academy.



Duration:  
**7 hrs** (per course)



Standard Fee Per Course:  
**\$535**

After 90% SSG Funding:  
**\$60.50** (T&C apply)

*Fees stated are inclusive of 7% GST.*



Click or Scan QR for more details.

# IN-HOUSE TRAINING

At PaCE@NTU, we work with some of the finest academics and experienced industry practitioners in the region. We are positioning ourselves to be one of the region's most preferred learning partners for top professionals, leading organizations and government institutions. You can rely on our capability, experience and know-how to customise training programmes to meet your requirements.

## OUR VALUE PROPOSITION:

### SSG Funded Courses



We have a series of SSG Funded courses for in-house training specially catered for your staffs. With a more cost-effective proposition, this allows more staffs to be able to attend the courses. Our experienced trainers can contextualise the course to cater to your training needs without diverting from the training objectives. To help defray training costs, we work closely with government agencies to secure funding for our clients.

### Digital Transformation



We have an array of courses to transform your organisation digital needs. We worked with various agencies and MNC to provide training such as data analytics, digital marketing for their transformation.

### Convenient



Our courses can be conducted in various modes at your convenience. Mode of learning include face-to-face learning at NTU@one-north, NTU main campus or at your premise, or conducted virtually in synchronous and/or asynchronous learning.

### Customisable



Our pool of experienced in-house trainers can customise and develop new courses to cater to your organisation training needs.

### Industrial 4.0



Building on NTU's strength, we develop and conduct a series of in-demand courses such as IoT, AI to meet the fourth industrial revolution trends.



Click or Scan QR for more details.

# REGIONAL EXECUTIVE PROGRAMMES

Our customised Regional Executive Programmes create invaluable learning and networking opportunities for industry leaders, senior executives, government leaders and entrepreneurs from the region.

Come and let your minds be challenged through this unique process of exchanging ideas, cultural perspectives and business best practices.

## WHY US



We have a team of highly experienced and professional trainers to deliver excellent quality training programmes with a personal touch that will make your learning journey truly enriching and memorable.



Your training requirements can be curated to your training objectives.



Learning can be integrated with various site visits to enhance your learning experience. If virtual learning is your preference, we will be glad to arrange it for you.



Click or Scan QR for more details.



**NANYANG TECHNOLOGICAL UNIVERSITY, SINGAPORE  
CENTRE FOR PROFESSIONAL AND CONTINUING EDUCATION  
(PACE@NTU)**



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*Information is correct at the time of printing (June 2021).*

*PaCE@NTU reserves the rights to discontinue any course or amend course information without prior notice.*