



Standard Academic CV

Please see [notes for guidance](#) to help you complete the cv

1. Personal Information	
Name	Dr Chak Wah Cheung
Employee number	80002413
2. Current Appointment	
Post and grade	Senior Lecturer/Programme Director (SP51) : Department of Mechanical Engineering and Aeronautics (MEA) Programme Director: SMCSE Foundation Programmes, Westminster Kingsway College, City and Islington College, INTO/CITY and Kaplan International College
Date of appointment to current post	Senior Lecturer – 2003 Programme Director – 2012
School	School of Engineering and Mathematical Sciences
3. Previous Substantive Appointments (at City and elsewhere)	
Date	Appointment
October 2012- Present	Programme Director – Mechanical Engineering and Aeronautics, Programme Director – School Foundation Programmes, City University London
August 2008- October 2013	Assistant Dean – School Foundation Programmes, City University
August 2007- August 2008	Associate Dean – Undergraduate Recruitment, City University
August 2003- August 2007	Senior Lecturer/Director of Studies/Assistant Dean – Mechanical Engineering and Aeronautics, City University
August 2001- 2003	Programme Director – Aeronautical Engineering, City University
August 1995- 2001	Lecturer/Admissions Tutor – Mechanical Engineering and Aeronautics, City University
July 1994- August 1995	Lecturer – Mechanical Engineering and Aeronautics, City University
March 1985- July 1994	Assistant Engineer → Principal Engineer, British Aerospace Plc (now BAE Systems)
4. Other Appointments (e.g. clinical appointments, honorary appointments)	
Date	Appointment
Sept 2009- 2016	external examiner for Cranfield University's MSc dissertations by research
Oct 2011 – until 2015	external examiner for the engineering foundation programme at Brighton University
10 th June 2009	external member of the validation committee for BSc(Hons) Engineering top up degrees, Brighton University
15 th March 2012	external member of the validation committee for BEng(Hons) Aeronautical Engineering, Farnborough College of Technology

5. Qualifications Achieved					
Date	Title of award	Subject	Class	Awarding body	
August 1996	PhD	Aeronautical Engineering	N/A	University of London	
August 1981	BSc (Eng)	Mechanical Engineering	Upper 2nd	University of London	
June 2002	DPSI	Diploma in Public Service Interpreting	Merit	Institute of Linguists	

6. Membership of Professional Bodies			
Date of joining	Professional body	Level/Role	
16/3/1992	Royal Aeronautical Society	Fellow – from 2005	
13/8/2001	Higher Education Academy	Fellow – from 2005	
10/5/2007	Institute of Mathematics and its Applications	Fellow – from 2007	

7. Education

7a Educational responsibilities in the current academic year							Year	2012-2013
Module	AEM226 – Structural Dynamics and Aeroelasticity							
Leadership/Educational responsibilities	Module leader							
Level of study	4	Number of students	3	Proportion of module facilitated (%)	50			
Module-level evaluation	Teaching	4.8	Assessment and feedback	4.8	Overall	4.3	Response rate	100%
Commentary on own contribution (include actions to enhance learning)	This M-level module was created in response to anticipated growth in the number of MEng Aeronautical students following the termination of the Air Transport Engineering programme and the materials presented are very much focused on methodologies and practices used in the aircraft industry for detailed design.							

Module	AE3204 – Aircraft Structural Analysis							
Leadership/Educational responsibilities	Module leader							
Level of study	3	Number of students	9	Proportion of module facilitated (%)	50			
Module-level evaluation (where available)	Teaching	4.8	Assessment and feedback	5.0	Overall	5.0	Response rate	33.3%
Commentary on own contribution (include actions to enhance learning)	This module has been created this year as an elective module to meet the need of our Parts 3/4 mechanical and automotive engineering students. The content I deliver for this module is common to the above module AE3204 for aeronautical engineering students. The major feature of this module is the heavy emphasis on the use of computational tools for the solution of complex engineering problems.							

Module	ME2109							
Leadership/Educational responsibilities	Module lecturer							
Level of study	2		Number of students	93	Proportion of module facilitated (%)			30
Module-level evaluation (where available)	Teaching	4.4	Assessment and feedback	4.5	Overall	4.4	Response rate	17%
Commentary on own contribution (include actions to enhance learning)	My contribution to the teaching of this newly created (core) super-module of 45 credits is in the key area of engineering structures. The lectures are attended by all Part 2 MEA students. I have recently introduced the new teaching method of using in-class demonstration of problem solving by graphical and analytical methods that can be repeated readily using MS Excel so that students can practice and learn the method much easier and faster.							

Module	AE2203 – Part 2 Aircraft Analysis and Design							
Leadership/Educational responsibilities	Module lecturer							
Level of study	2		Number of students	27	Proportion of module facilitated (%)			30
Module-level evaluation (scale: 1-lowest, 5-highest)	Teaching	4.3	Assessment and feedback	4.1	Overall	4.1	Response rate	67%
Commentary on own contribution (include actions to enhance learning)	I am jointly responsible for delivering this 30 credit module for Part 2 Aeronautical and Air Transport students, focusing mainly on aircraft structural analysis and design.							

Module	AE3100 – Part 3 Aeronautical Design							
Leadership/Educational responsibilities	Module lecturer							
Level of study	2		Number of students	15	Proportion of module facilitated (%)			70
Module-level evaluation (scale: 1-lowest, 5-highest)	Teaching	4.2	Assessment and feedback	3.6	Overall	4.3	Response rate	53%
Commentary on own contribution (include actions to enhance learning)	I am largely responsible for delivering this 30 credit module for Part 3 Aeronautical and Air Transport students, focusing mainly on commercial aircraft design and methodology.							

(copy and paste the above for additional modules)

7c	Summary of significant personal achievements in education
<p>(1) The teaching of my modules, their contents and delivery received some of the highest rating consistently over the past years in our internal student feedback exercises and I was nominated for the Student Voice Award for my teaching in 2010. Some of the students whom I taught over the past 20 years at City University have progressed to become leaders in their respective industry. This year, I was short-listed for the VC award for excellence in Teaching and Learning.</p> <p>(2) I am largely responsible for overseeing the quality and standard of all our foundation programmes. I am also responsible for the design and organisation of laboratory and CAD exercises for the large group foundation students (~150) which not only has been self-funded but also provided these students a good educational transition experience in preparation for</p>	

their degree studies at City University. Evidence of high quality of foundation programmes and their success have been demonstrated by our progression statistics in the last two years which show that former foundation students have consistently performed at the highest level and better than other students admitted through the traditional A-level routes.

(3) I have been a Fellow member of the Higher Education Academy and I have been acting as an external examiner for two well-known universities in the UK, helping to monitor and maintain high academic quality and standard across the UK higher education system.

(4) Throughout 20 years of teaching and programme management at City University and as a leading member of staff in the Department of Mechanical and Aeronautics, I have played a leading role in securing continual programme accreditation in 2005, 2010 and periodic reviews in 2008 and 2013, improving the academic quality and standard and maintaining the currency of our degree programmes in the processes.

8. Research

8a Summary of current research

My current research has been focused on the modelling of aerodynamic flows for the analysis of and providing solution to aeroelastic design problems such as aircraft wing flutter and gust responses.

8b Summary of research in the previous three years

Over the past few years, my research interests cover areas ranging from modal testing and finite element analysis of engineering structures, computational unsteady aerodynamics, and air transport engineering management.

8c Summary of significant personal achievements in research, including any impact beyond academia (this may arise from the use of your research by others as well as by you)

Two of my programs developed through my research have been adopted and used routinely by the aircraft industry for the aeroelastic design of flight vehicles.

8d Research grants and contracts awarded in the last three years

Start and end dates	PI and Co Investigators	Funding body	Title of the project	Amount awarded to City	Total amount (if different)
N/A	N/A	N/A	N/A	N/A	N/A

8e Research grants and contracts bids submitted in the past three years

Start and end dates	PI and Co Investigators	Funding body	Title of the project	Amount applied for City	Total amount (if different)
N/A	N/A	N/A	N/A	N/A	N/A

9. Publications

Please attach your list of publications following the format below. The link below will take you to guidance on how to use City Research Online (CRO) to do this (see section 9 on the webpage).

<http://www.city.ac.uk/research/research/support-for-researchers/city-research-online>

Please include:

- Citations, where applicable and where you consider this to be of significance
- Whether you were the main author (or joint main author), where applicable, with a Y or = next to the reference, if this is not indicated by the order of the authors
- an asterisk * next to any especially significant publications

Category *	Main Author Y or =	Publications Please insert number of citations where applicable
Journal papers	Y	1. On a Flexible Algorithm with Applications to Panel Element Equations - C.W. Cheung and C.H. Lai - IMA Journal of Numerical Analysis (2001) 21, 1-17.
		2. The effect of laminate lay-up on the flutter speed of composite wings – S.J. Guo, J.R. Banerjee and C.W. Cheung – Proc. Institution of Mechanical Engineers, Vol 217 Part G: Journal of Aerospace Engineering – April 2003.
	*	3. Theoretical Determination of Subsonic Oscillatory Airforce Coefficients for Cruciform-tail Configurations - C.W. Cheung – Journal of Algorithms and Computational Technology, Vol 1, No. 1. – March 2007
Conference papers	*	4. Numerical Computation of Subsonic Oscillatory Airforce Coefficients For Wing-winglet Configurations - C.W. Cheung – Journal of Algorithms and Computational Technology, Sept 2007.
		5. Free Vibration of a Three-layered Sandwich Beam using the Dynamic Stiffness Method and Experiment – J.R. Banerjee, C.W. Cheung , R. Morishima and M. Perera – International Journal of Solids and Structures 44 (2007) 7543-7563.
		6. Cutout Reinforcements for Shear Loaded Laminated and Sandwich Composite Panels – S. J. Guo, C.W. Cheung and L. Zhou – International Journal of Mechanics and Materials in Design – Jan 2008.
		7. The influence of Ply Orientation on the Free Vibration of Laminated Composite Beams - J. Njuguna, H. Su, C.W. Cheung and J.R. Banerjee - Proc ACUN-4 Composite Systems - Macropcomposites, Microcomposites, Nanocomposites - UNSW, SYDNEY, Australia, 21-25 July 2002.
		8. Free Vibration of Metallic and Composite Beams Exhibiting Bending-Torsion Coupling – H. Su, C.W. Cheung and J.R. Banerjee – Ninth International Conference on Civil and Structural Engineering Computing – Egmond-aan-Zee, The Netherlands, September 2003.
		9. Theoretical and Experimental Modal Analysis of Laminated Composite Beams – J. Njuguna, J.R. Banerjee and C.W. Cheung – 2 nd Seminar on Modern Polymeric Materials for Environmental Applications under the auspices of EC Marie Curie Programme, March 23-25, 2006

10. Recent Advances in Segmented Polyurethane Nanocomposite – J. Njuguna, K. Pielichowski, J.R. Banerjee, J.R. Alcock and **C.W. Cheung** - 2nd Seminar on Modern Polymeric Materials for Environmental Applications under the auspices of EC Marie Curie Programme, March 23-25, 2006
11. Feasibility Study on Establishing a Low Cost Carrier in Taiwan – Chiu-Hua Chang, S.J. Bond and **C.W. Cheung** – ATRS Conference, May 2005, Nogoya, Japan.
12. Cutout Reinforcements for Shear Loaded Composite Panels – S.J. Guo, L. Zhou and **C.W. Cheung** – 5th International Conference on Mechanics and Materials in Design, 24-26th July, Porto, Portugal, 2006.
13. Aeroelastic Optimisation of a Tapered Composite Wing Structure – S.J. Guo and **C.W. Cheung** - 5th International Conference on Mechanics and Materials in Design, 24-26th July, Porto, Portugal, 2006.
14. Free Vibration of a Three-layered Sandwich Beam using Theory and Experiment- J.R. Banerjee, **C.W. Cheung**, R. Morishima, M. Perera and J. Njuguna, 47th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference, 1-4 May 2006, Newport, Rhode Island, USA.
15. Taiwanese Airlines and Government Views of Low Cost Carrier Development Between Taiwan and other Asian Countries - Chiu-Hua Chang, S.J. Bond and **C.W. Cheung** - Air Transport Research Society World Conference, 21-24 June 2007, U.C. Berkeley, USA.
16. The Expectation of After 'Open Skies' Between Taiwan and China – Chiu-Hua Chang, S.J. Bond and **C.W. Cheung** – Air Transport Research Society Conference, 6-10th July 2008, Athens, Greece.
17. The study of Route Characteristics in the Taiwanese Market – Chiu-Hua Chang, S.J. Bond and **C.W. Cheung** - Air Transport Research Society Conference, 6-10th July 2008, Athens, Greece.

9a	Major conference presentations over the last three years (including current year) plus any significant participation in previous years		
	Date	Title and nature of involvement (e.g., keynote address)	
10.	Doctoral Research Student Supervision (see Senate Regulations 23 and 24 for the list of eligible degrees)		
10a	Number of students		
	Degree	Current	Completed
	PhD		2
10b	Doctoral studentships awarded		
	Source of funding	Date of award	

10c Details of Doctoral research students supervised to completion				
	Student name	Degree and title of thesis	Start date	Completion date
	ChiuHua Chang	Airline Development Strategies and Feasibility Study on Establishing a Low Cost Carrier in Taiwan	Oct 2005	March 2009
	Liangchen Zhou	Aerodynamic and Structural Study of Flapping Wing Vehicle	Feb 2006	July 2013
10d Additional achievements in supervision e.g., supported a student to publication, their future career				
	While at City University, the above former PhD student was supported and provided funding to present 5 conference papers in international air transport research society conferences (ATRS) and numerous newspaper articles in Taiwan, generating significant amount of interest to his research work. After his graduation, Dr Chang subsequently secured a key management position in a major airline company in Taiwan.			
11. Contributions to Enterprise				
11a Summary of current contributions to enterprise				
11b Details for the last three years (including current year)				
	Date	Nature of contribution	Value to City	
12. Contributions to Professional Practice				
Details for the last three years (including current year) together with a summary of significant contributions in previous years				
	Date	Nature of contribution		
	2003-2014	I was a member of the certification committee of a major international certification body (Bureau Veritas) whose key business is to provide certification auditing on quality management systems and related standards such as AS9100. Acting as an independent consultant from the aerospace sector, my role involves advices on the current status and future direction in the global certification business and development of quality management standards as the air transport and aerospace industries are undergoing rapid changes in response to relentless growth in air traffic as well as the need for sustainable development in the industry.		
	2001-2010	Up until recently, I had been acting as the Academic Liaison Person (ACL) between City and the Institution of Mechanical Engineers (IMechE), feeding back our views to the Institution and relaying back responses and important events and conference news that are of interests to our student and staff.		
13. Indications of Peer Esteem				
Details for the last three years (including current year) together with a summary of significant contributions in previous years e.g. external examinerships, honorary fellowships, editorial board memberships and major awards, honours and prizes				
	Date	Nature of recognition		
	Sept 2009-2016	I am an external examiner for Cranfield University's MSc dissertations by research		
	Oct 2011 - present	I am an external examiner for the engineering foundation programme at Brighton University		

14. Contributions to Administration, Management, Educational and Research Development and Academic Leadership in the University and/or School

Details for the last three years (including current year) together with a summary of significant contributions in previous years


14a School

Date	Nature of contribution
2012-Present Programme Director – Mechanical Engineering and Aeronautics	(1) As the Programme Director for the Department of Mechanical Engineering and Aeronautics (MEA), I was working closely with the head of department and leading the team through the successful accreditation and internal periodic review of our degree programmes in 2010 and 2013 respectively. Throughout the last few years since I became the MEA programme director, the department has also undergone a number of significant internal reviews of our degree offering through streamlining and rationalisation of our programme module diets and assessment rules and the process is still ongoing. As a result, our programmes are now much better structured and their curriculum and contents are much more current and relevant to meet the demands by industries. The successes of these changes to our degree programmes have been clearly demonstrated by the gradual improvement in student learning experience and satisfaction which has been very much reflected in our recent NSS scores. More importantly, our students have consistently performed well in the job market with 75% of them securing employment within six months after their graduation
2009-Dec 2013 Assistant Dean – Foundation Programmes	(2) As Assistant Dean for the School's foundation programmes, I am responsible for the quality and standards development of our foundation programmes in order to make sure that they are fit-for-purpose in preparing students for a smooth transition to our engineering degree programmes at City. Through my chairing of regular discussions and programme management committee meetings between staff from City and our educational partners, I have succeeded in building a good working partnership with City and Islington College and Westminster Kingsway College for the provision of two engineering foundation programmes (for mostly home students), feeding 120 (total number 150 in Sept 2013 intake) high quality students into our range of SEMs programmes over the last 15 years and will continue to do so for many years to come. Progression criteria are reviewed on an annual basis to ensure they are in line with the university strategic aim to raise the overall A-level entry tariffs for entry into our degree programmes across the University. The successes of the foundation programmes have been clearly demonstrated by the fact that foundation students have enjoyed some of highest progression rate with large percentage of them eligible for registration to MEng route and outperforming students admitted through the traditional A-level routes. (3) I am responsible also for the planning and organising resources for the quality provision and timely delivery of laboratory and AutoCaD exercises for all foundation students which have been designed to enhance the students' learning experience and familiarity with City's learning environment and staff. (4) On the internal recruitment front, new partnership and joint venture have been successfully established recently with Kaplan and INTO/CITY respectively through a period of my active negotiation and participation in various programme validation panels and committees on behalf of SEMs and Sol so that I was able to contribute to decision makings on issues relating to the establishment and development of high quality and sustainable foundation programmes for overseas students. International student numbers have been increased from 19 registered last year to 25 offers made to Kaplan/INTO students this year.
	(5) I am the module leader for 3 core modules with the responsibility for developing the contents and managing the delivery of these modules. I am also involved in joint delivery of three other modules. I have a total of over 180 hours of teaching in the current academic year. I also act as supervisor for a number of final year undergraduate projects as well as a PhD research project.

	<p>I am either a member or chairman of the following committees:</p> <ul style="list-style-type: none"> (i) School Board of Studies (BoS), (ii) School Learning and Teaching Committee (iii) MEA Programme Management Committee (iv) Chair for the Programme Management Committee for City and Islington EEIE foundation programme (v) Chair for the Programme Management Committee for Westminster Kingsway Civil/MEA foundation programme (vi) INTO/CITY Course Board (vii) SEMs representative in the Kaplan Clearing Board (viii) Chairman for the MEA Extenuating Circumstances Panel
2003-2007 <i>Assistant Dean – MEA programmes</i>	(6) As the former Assistant Dean for the MEA programmes, I led the MEA team of staff in achieving the previous 5-year accreditation in 2005 up to 2009 by the above two professional institutions and the QAA departmental engagement exercise in 2003 as well as migration of our degree programmes based on the newly developed credit-based system of high education level credits and learning outcomes and competencies published by the UK Engineering Council (UK-SPEC).
	(7) I am a registered Chartered Engineer since 1992 and have gained the following professional Fellow memberships: <ul style="list-style-type: none"> (a) The Royal Aeronautical Society, (b) The Institute of Mathematics and its Applications (c) The Higher Education Academy

14b University

Date	Nature of contribution
July 2009 July 2015	I was a member of the validation committee for the creation of the INTO foundation programme for science and engineering studies, giving my advices on behalf of the School on the appropriateness of the curriculum, teaching and assessment methods, entry and progression criteria relating to the programme. The INTO foundation programme was successfully launched in September 2009. As recently as in 22 nd June 2015, I was involved in the revalidation exercise of the same set of programmes.
Oct 2010	I was a member of the validation committee for the re-validation of the City and Islington/City University Foundation Degree programme, giving my advices as a member of the City and Islington College/City University Course Board on the appropriateness of the curriculum, teaching and assessment methods, entry and progression criteria relating to the programme. The Foundation Degree was successfully revalidated early this year.
2009-present	I am a member of the City and Islington/ City University Course Board which is the board responsible for the management and development of academic quality and standard and enhancement of learning experience for a whole range of partnership programmes between the two institutions for which City has a major role to play. This board reports directly to the University's Education and Teaching Committee.
2009-present	I am a member of the INTO/CITY foundation course board which is the board responsible for the management and development of academic quality and standard and enhancement of learning experience for the INTO foundation and graduate diploma programmes.
2003-present	I am a member within the pool of academics who have been approved by the Senate to sit in the University's Appeals, Complaints and Enhancement Panel hearings whenever I am required.

15.	Staff Development			
15a	Staff development activities undertaken over the last and current year plus any significant activities in previous years			
	Date	Activity		Length (in days)
15b	Qualifications currently undertaking			
	Start date	Expected completion date	Title of Award	Subject
15c	Staff development activities co-ordinated, tutored, led or initiated over the last three years (including current year) plus any significant activities in previous years			
	Date	Activity		Length (in days)
15d	Study/sabbatical leave taken over the last three years (including current year)			
	Date	Purpose		
15e	Activities and achievements in the most recent period of study/sabbatical leave			
	Date	Description of activities and achievements		
16.	International Activities			
	Details for the last three years (including current year) together with a summary of significant activities in previous years			
	<p>Between 2009-2011, I have been a visiting lecturer for two universities in China, Nanjing University of Aeronautics and Astronautics (NUAA) and Harbin University of Science and Technology (HUST), giving lectures to groups of Chinese students studying engineering degrees as a way of promoting City University degree programmes and familiarising the Chinese students who had already applied to come to study at City University.</p>			
17.	Other Relevant Information (please include contributions at other institutions)			
	Signed		Date	6/3/2017