# Information Session for BSc(ActuarSc) (6729) Freshmen in 2019-20

Date: August 9, 2019 (Friday)

Time : 2 p.m. - 4 p.m.

Venue: CPD-LG.18, LG/F,

Centennial Campus, HKU

This session is very important for all actuarial science freshmen. In this session, the students will meet our actuarial science teachers. The session will cover various important topics about the actuarial profession and the HKU actuarial curriculum, including course selection, internship opportunities, exchange program, exemptions from professional bodies, etc. Towards the end of the session, students are free to ask questions.

# Your Degree

- Bachelor of Science in Actuarial Science
  - BSc(Actuarial Science)
  - BSc(ActuarSc)
  - BSc(AC)



- Department of Statistics and Actuarial Science
- Faculty of Science (6 Departments/School)
- The University of Hong Kong (10 Faculties)



# First Year Experience

http://wp2.cedars.hku.hk/fye/



### hku.hk/science > www.scifac.hku.hk

# Current Students → [Undergraduate Programmes] Useful Resources → Handbooks





About Us



### **Undergraduate Programmes**

- · About the programmes
- · Academic Matters
- Student Experiential Learning and Enrichment Opportunities

### Useful Resources Handbooks

- Forms
- · Calendar & Timetables
- · Articulation Pathways
- News

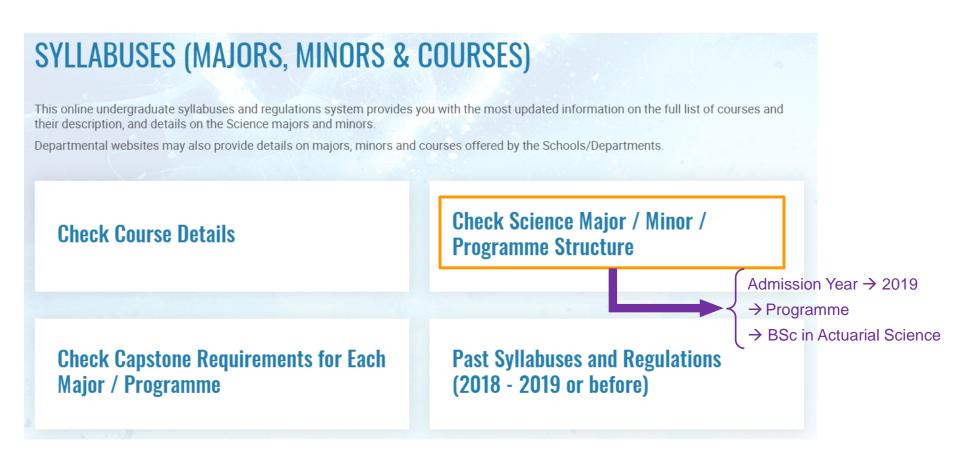
### Research Postgraduate Programmes

- · General Information
- News
- Coursework Information



### hku.hk/science > www.scifac.hku.hk

Current Students → [Undergraduate Programmes]
Academic Matters → Syllabuses (Majors, Minors & Courses)



#### Required courses (132 credits) 1. Year I Courses Disciplinary Core Courses (42 credits) ACCT1101 Introduction to financial accounting (6) Introductory microeconomics (6) ECON1210 Introductory macroeconomics (6) ECON1220 Mathematical methods for actuarial science I (6) MATH1821 MATH2822 Mathematical methods for actuarial science II (6) STAT2901 Probability and statistics: foundations of actuarial science (6) STAT2902 Financial mathematics (6) 2. Year II Courses Disciplinary Core Courses (42 credits) Computer programming (6) COMP1117 Life contingencies I (6) STAT3901 STAT3902 Statistical models (6) STAT3903 Stochastic models (6) STAT3904 Corporate finance for actuarial science (6) STAT3905 Introduction to financial derivatives (6) STAT3907 Linear models and forecasting (6) 3. Year III Courses Disciplinary Core Courses (30 credits) Risk theory I (6) STAT3906 Credibility theory and loss distributions (6) STAT3908 STAT3909 Life contingencies II (6) STAT3910 Financial economics I (6) Statistical learning for risk modelling (6) STAT4904 4. Year IV Courses Disciplinary Electives (12 credits) At least 12 credits selected from the following courses: STAT3911 Financial economics II (6) STAT3951 Further topics in contingencies (6) Fundamentals of actuarial practice (6) STAT3953 STAT3954 Current topics in actuarial science (6) Survival analysis (6) STAT3955 Pension funds and pension mathematics (6) STAT3956 Credit risk analysis (6) STAT4607 STAT4608 Market risk analysis (6) STAT4901 Risk theory II (6) Selected topics in actuarial science (6) STAT4902 Actuarial techniques for general insurance (6) STAT4903 5. Capstone Requirement (6 credits) At least 6 credits selected from the following courses: STAT4711 Capstone experience for actuarial science undergraduates (6) Actuarial science internship (6) STAT4767 Statistics and actuarial science project (6) STAT4798

### **BSc(ActuarSc) Programme Requirements**

### **Remarks:**

- Core: MUST take
- 1 course = 6 credits
- 240 credits = graduation
- Study 8 semesters
   (include exchange, exclude internship)
- 1 semester = 30 credits = 5 courses
- 1 year = 60 credits = 10 courses
- > 36 or < 24 credits in one semester</li>
   → need special approval, not allowed in first year
- Total number of credits cannot exceed 288 credits

## hku.hk/statistics -> saasweb.hku.hk



- BSc (Major in Decision Analytics)
- ▶ BSc (Major in Risk Management)
- BSc (Major in Statistics)
- → BSc(ActuarSc)
- **▶ MDASC**
- ▶ MStat
- Research Postgraduate
- Student Internship
- ▶ Scholarships
- Career Advising Programme (CAP)
- → Useful Links
- ▶ Plagiarism
- ▶ Exchange

### Bachelor of Science in Actuarial Science (BSc(ActuarSc))

### Courses

Syllabuses & Regulations for BSc(ActuarSc) #

# Inside "Check Course Details" you can type STAT in the "Course Code" box in order to view the list of all STAT courses. \*For reference only. The course schedule and venue may be subject to changes. Students are strongly advised to double check the course schedule and venue on HKU Portal before going to the lectures.

- Actuarial Project / Directed Studies / Capstone Experience Courses (2019-20)
- STAT4767 Actuarial Science Internship

### > For Freshmen

- Information Session for Actuarial Science Freshmen 2018-19 (Updated on June 27, 2018)
- AS Induction Day (Updated on August 10, 2018)
- Notes on Course Selection for Actuarial Science Freshmen (2018-19) (Updated on August 23, 2018)
- BSc(ActuarSc) first year timetable 2018-19 (Updated on August 17, 2018)
- Suggested BSc(ActuarSc) 4-year Curricular Structure (for students admitted in 2018) (Updated on August 6, 2018)

Center of Actuarial Excellence

. Structure of Courses for BSc(Actuarial Science) (for students admitted in 2018) (Updated on August 6, 2018)

# **Academic Dates Terminology**

SEP-19

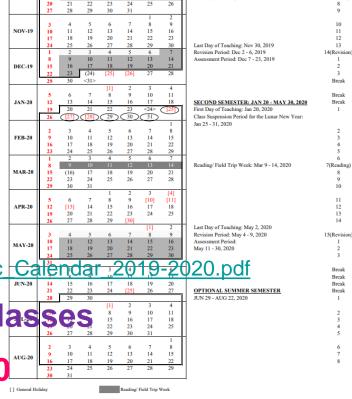
HKU: 1<sup>st</sup> Semester, 2<sup>nd</sup> Semester, Summer Semester

Course selection period

- Suspension period
- Add/drop period
- Reading week
- Revision period
- Assessment period
- Check the Faculty calendar:

https://www.scifac.hku.hk/f/page/4832/10862/Academic Ca

- Important Academic Dates 2019-20
- From Academic Advising Office (AAO):



First Day of Teaching: Sep 2, 2019

Reading/Field Trip Week: Oct 14 - 19, 2019

http://aao.hku.hk/sy3/plan-of-study/important-academic-dates

# 2019-2020 First Semester

### Teaching period

Teaching Weeks 2019-20 for Undergraduate and Taught Postgraduate Students

	SUN	MON	TUE	WED	THUR	FRI	SAT
	1	2	3	4	5	6	7
	8	9	10	11	12	13	[14]
SEP-19	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30					
			[1]	2	3	4	5
	6	[7]	8	9	10	11	12
OCT-19	13	14				18	19
	20	21	22	23	24	25	26
	27	28	29	30	31		
						1	2
	3	4	5	6	7	8	9
NOV-19	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
DEC-19	15	16	17	18	19	20	21
	22	23	(24)	[25]	[26]	27	28
	29	30	<31>				

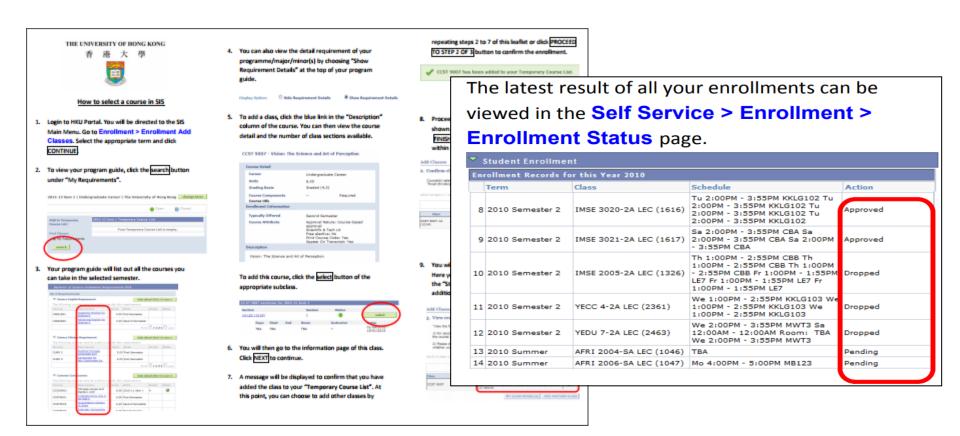
FIRST SEMESTER: SEP 2 - DEC 23, 2019	Week
First Day of Teaching: Sep 2, 2019	1
	2
Tutorial classes usually	3
•	4
start from the 2 <sup>nd</sup> week of teaching	5
(Follow instructions of individual courses	)
	6
Reading/ Field Trip Week: Oct 14 - 19, 2019	(Reading)
	8
	9
	10
	11
	12
Last Day of Teaching: Nov 30, 2019	13
	(Revision)
Assessment Period: Dec 7 - 23, 2019	1
	2
	3
	Break

# **Special Approval**

- Prerequisite not met
  - Course Approval Form to Department
- Time clash
  - Course Approval Form to Department
  - Not approved unless under very special circumstances
- Taking course load deviating from normal load
   (> 36 or < 24 credits in 1 semester, or > 72 credits in 1 year)
  - Application form to Department
  - Not for first year students
- All the forms are downloadable from the Faculty website:
   Current Students → [Undergraduate Programmes] Useful Resources → Forms

# Course Selection Reminder

- A step-by-step manual for course selection in SIS
  - https://aal.hku.hk/studyabroad/attachment/upload/Quick\_Guide\_on\_
     Course\_Selection\_and\_Enrollment.pdf



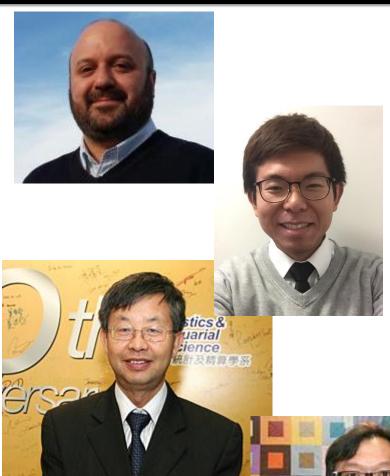
# Course Selection Advisers

- Dr. K.C. Cheung
  - RRS219
  - kccg@hku.hk
- Dr. D. Lee
  - RRS120
  - leedav@hku.hk
- Dr. K.P. Wat
  - RRS235
  - watkp@hku.hk



# Other Actuarial Teachers

- Dr. A.G. Benchimol
  - RRS120
  - benchi@hku.hk
- Dr. J.T.Y. Wong
  - RRS221
  - jtywong@hku.hk
- Prof. H. Yang
  - RRS232
  - hlyang@hku.hk
- Prof. K.C. Yuen
  - RRS231
  - kcyuen@hku.hk
  - Programme Director



# **Professional Exams**

- Institute and Faculty of Actuaries (IFoA) (<a href="https://www.actuaries.org.uk/">https://www.actuaries.org.uk/</a>)
  - To be an Associate of IFoA:
    - Core Principles (CS1-2, CM1-2, CB1-3)
    - Core Practices (CP1-3)
    - Personal and Professional Development (PPD)

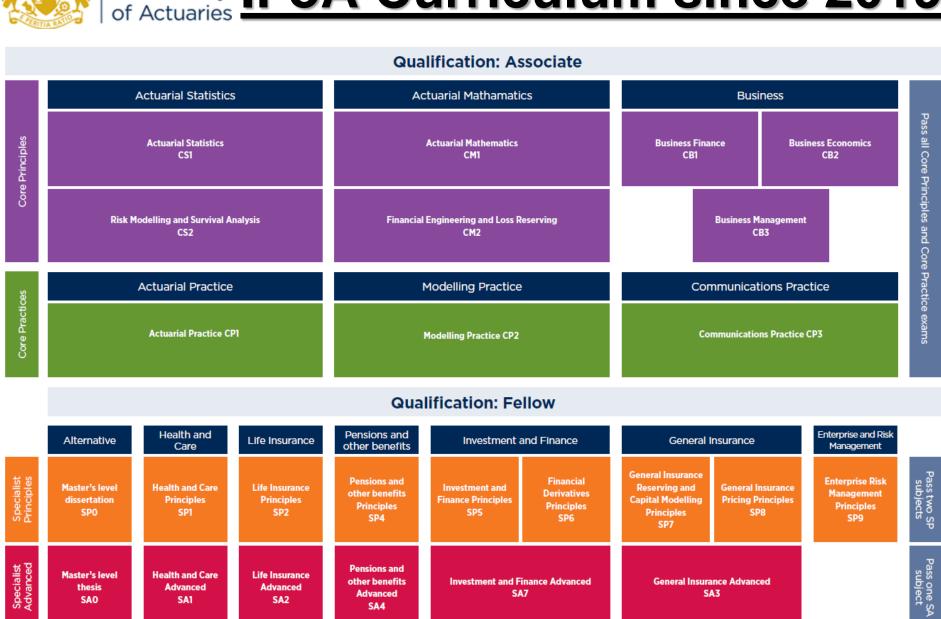


- Society of Actuaries (SOA) (<a href="https://www.soa.org">https://www.soa.org</a>)
  - To be an Associate of SOA (ASA):
    - 7 Exams: P, FM, IFM, LTAM, STAM, SRM, PA
    - 3 VEE Topics: (https://www.soa.org/education/exam-req/edu-vee.aspx)
      - ✓ Economics
      - ✓ Accounting and Finance
      - ✓ Mathematical Statistics
    - FAP e-Learning Course
    - Associateship Professionalism Course (APC)





# and Faculty of Actuaries IFOA Curriculum since 2019





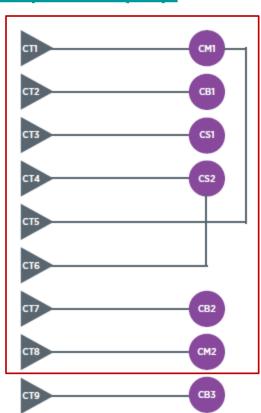
# IFoA Accreditation

- Currently, our Department has an accreditation agreement with IFoA for the exemption of the existing IFoA subjects CT1 to CT8.
- https://saasweb.hku.hk/current/as/ac-exemptions.php
- In 2019, the IFoA curriculum will change and the current CT1 to CT8 will be replaced by 6 Core Principles exams (CS1-2, CM1-2, CB1-2)



### **Updates:**

We are now in the final stage of applying for the new accreditation agreement for a block exemption of all the 6 Core Principles exams for BSc(ActuarSc) students graduating with satisfactory results.



# **SOA Curriculum since 2018**



Qualification: Associate

INTRODUCTORY I	INTRODUCTORY II	ACTUARIAL	ADVANCED	PROFESSIONALISM
VEE ECONOMICS *ECON1210, *ECON1220	EXAM INVESTMENT AND FINANCIAL MARKETS	EXAM  LONG-TERM ACTUARIAL  MATHEMATICS STAT3901,  STAT3903, STAT3906,	e-LEARNING FUNDAMENTALS OF ACTUARIAL PRACTICE STAT3953	SEMINAR ASSOCIATESHIP PROFESSIONALISM COURSE
VEE ACCOUNTING AND FINANCE *ACCT1101, *STAT3904	STAT3903, STAT3904, STAT3905, STAT3910	STAT3909, STAT3956  EXAM  SHORT-TERM ACTUARIAL MATHEMATICS	OTATO300	
EXAM FINANCIAL MATHEMATICS		STAT3906, STAT3908, STAT4903		
EXAM PROBABILITY STAT2901, STAT3902	VEE MATHEMATICAL STATISTICS *STAT3902	EXAM STATISTICS FOR RISK MODELING STAT3907, STAT4608, STAT4904	PROJECT PREDICTIVE ANALYTICS STAT4904	

# **SOA Preliminary Exams**

### Exam P

- STAT2901, STAT3902

### Exam FM

- STAT2902, STAT3905

### Exam IFM

STAT3903, STAT3904, STAT3905, STAT3910

### Exam LTAM

STAT3901, STAT3903, STAT3906, STAT3909, STAT3956

### Exam STAM

STAT3906, STAT3908, STAT4903

### Exam SRM

STAT3907, STAT4608, STAT4904

### Exam PA

- STAT4904





### **SOA Validation by Educational Experience (VEE)**

- VEE Economics
  - ECON1210, ECON1220
- VEE Accounting and Finance
  - ACCT1101, STAT3904
- VEE Mathematical Statistics
  - STAT3902

### Remarks:

There are other courses approved by SOA, but they are *not core* courses of the BSc(AC) programme. Some of them are *mutually* exclusive with our core courses.

https://saasweb.hku.hk/current/as/vee.php



# Other Graduation Requirements

- Other than taking Disciplinary Core and Elective courses
- 3 Language Courses
  - CAES1000 (Year 1)
  - CAES9821 (Year 2) [no exemption with whatsoever qualifications]
  - CSCI9001 (Year 3)
- 6 Common Core (CC) Courses
- 1 Capstone Course
  - STAT4711 [Group Project]
  - STAT4767 [Internship]
  - STAT4798 [Individual Project]



# Exchange Credit Transfer

- Faculty of Science: Course Equivalence Database
  - https://webapp.science.hku.hk/student/servlet/course\_equiv

### For credit transfer reference:

University

18. Canada - University of Toronto

Canada - University of Toronto

No. Partner Code

ACT349H1

ACT370H1

ACT451H1

ACT455H1

ACT460H1

ACT466H1

ACT470H1

Students on exchange may take courses regarded as equivalent to some HKU courses to fulfill the degree requirement.

COURSE EQUIVALENCE DATABASE

Partner Title

Loss Models

Corporate Finance for Actuarial Science

Advanced Topics in Actuarial Science

Credibility and Simulation

Advanced Pension Mathematics

Stochastic Methods for Actuarial Science

Financial Principles for Actuarial Science II

Partner Credit/Unit

0.5

0.5

0.5

0.5

0.5

0.5

0.5

12. UFI 100 105	THE	UNIVERSITY OF HONG KONG FACULTY OF SCIENCE	For <b>4</b> -Year Curriculum
	Application for Leave	e of Absence and Transfer of Cr	edits for
		Sc) Outgoing Exchange/Visiting Stude	
	( Acad	demic Year :)	
IMPORTANT NOTES:  1. This form should be submitted to the Face	alty Office, with all supporting documents attached, at least 1	month before the date of departure	
2. The Dean, on the recommendation of the	Department concerned, would consider your application for t	transfer of credits. Transfer of credits is conditional upon your succe	
the end of the add/drop period at your hos	st institution for any change of your applied list of courses [i	ncluding applying new course(s) for credit transfer, dropping applied	ventually at your host institution. In such case, you should inform the Faculty d course(s) and change of equivalent course(s) at HKU for applied course(s)]
	edit transfer application after 1 month of the commencement calculation of GPA. Only the examination results obtained		ation. The Board meets in late June each year to determine honours classificati
Part I: General Information			
Name :	() Programme of study:	University No :Year of A	dmission to BSc:Current Year of study: 1/2/3/4 *
Intended Major & Minor : Major(s) in		(Major 2) Minor(s) in	
Contact Telephone Number :	Email address :	Period of exchange/visiting :	[Period of leave of absence to be applied: (MM/YY - MM/YY)]
Host Institution and Country :		Duration	: 1st semester / 2nd semester / Summer Semester / 1 year *
Part II . Application for I care of	Absence and Credit Transfer (Please   wherever		delete as appropriate
		r appropriate) apply for transfer of credits to be taken at the host institution. (G	in to Part IV)
	ice for my exchange/visiting period and wish to apply for		
	credits of transfer to the HKU BSc / BSc(ActuarSc) deg		
Part III : Course information of h			
		edits. You may need to contact the host institution for such of	letaile
Duration of the undergraduate degree of			/umber of credits required for graduation (credit/unit):
	of each credit / unit of course : Deac		expected date of announcement of examination results:
		nstitution must be attached, otherwise your application for t	
	,	-1-	
HKU Code	HKU Credit	HKU Title	
	TING GIGGI		
STAT3904	6	Corporate finance fo	r actuarial science
STAT3910	6	Financial economics	il.
	-		
STAT3906	6	Risk theory I	
STAT3909	6	Advanced life contin	gencies
			•
STAT3911	6	Financial economics	· II
STAT3908	6	Credibility theory and	d loss distributions
07170050	_		
STAT3956	6	Pension funds and p	ension mathematics

# <u>Internship</u>

Hello my name is

INTERN

- Usually in Year 3 or Year 4
- 6 months (e.g. January-June or July-December)
- Need to apply for leave of absence, and defer the study

Apply Internship  Apply for Leave + Apply for Enrolment										•		Internship Period							reso		ati																								
	١	'ear	2	Sei	m	1	Year 2 Sem					ear 2 Sem 2						Year 3 Sem 1										Year 4 Sem 1						ar	4 S	em	2						eferi 'ear		
	9	10	) [	11	1	2	1	2	3	4	5	6	7	8	9	10	)	11	12	1	2	3	4	5	6	7	8	9	10	1	1	12	1	2	3	4	5	6	7	8	9	10	1	1 1	2

- If you wish to use your internship to fulfill the Capstone Requirement: STAT4767 Actuarial science internship,
  - the earliest time you can start your internship is the summer after your
     Year 2 study;
  - you must have passed 4 advanced disciplinary courses including STAT3901 Life contingencies I prior to the start of the internship;
  - submit your registration prior to the start of the internship.
- Check the details on the Department website: <a href="https://saasweb.hku.hk/current/stat4767.php">https://saasweb.hku.hk/current/stat4767.php</a>

# **Career Support and Activities**

- Centre of Development and Resources for Students (CEDARS) (www.cedars.hku.hk)
- Prelude to Actuarial Internships and Workplace Etiquette Workshop
- Actuarial Internship Presentation by senior AS students
- Departmental Internship/Job Online-application System
- Career Advising Programme (CAP)
  - © Professional Preparation Programme (PPP)
  - Individual consultation on cover letter, CV and interview skills
  - © Corporate Mentorship Programme (CMP)
  - Market information workshop
  - © Firm visits and alumni sharing
  - © SAAS Career Fair



# **University Resources**

- HKU Library (HKUL)
  - lib.hku.hk
- Examinations Office
  - www.exam.hku.hk
- Centre of Development and Resources for Students (CEDARS)
  - www.cedars.hku.hk
- Academic Advising Office (AAO)
  - aao.hku.hk
- University Health Service (UHS)
  - www.uhs.hku.hk
- Centre for Sports and Exercise
  - cse.hku.hk/



