

# Information Session for BSc(ActuarSc) (6729) Freshmen in 2018-19

Date: August 10, 2018 (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 all the 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://wp.cedars.hku.hk/fileupload/files/dosa/CEDARSBrochure2018.pdf



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

Undergraduate → Current Students → Academic Advising → BSc(ActuarSc) → BSc & BSc(ActuarSc) Student Handbook

### Handbook for BSc & BSc(ActuarSc) Students

This student handbook contains useful information related to your study, including curriculum structure and requirements, major/minor declaration, course selection procedures, academic advising, examination, progression and discontinuation and degree regulations. You should familiarize yourself with the materials in this handbook. Should you need help related to your study, you are most welcome to contact your Academic Adviser, the Course Selection Advisers or the Faculty Office.

# HAND BOOK SHOWNS

# Download Handbook For BSc & BSc(ActuarSc) Students 2018-19

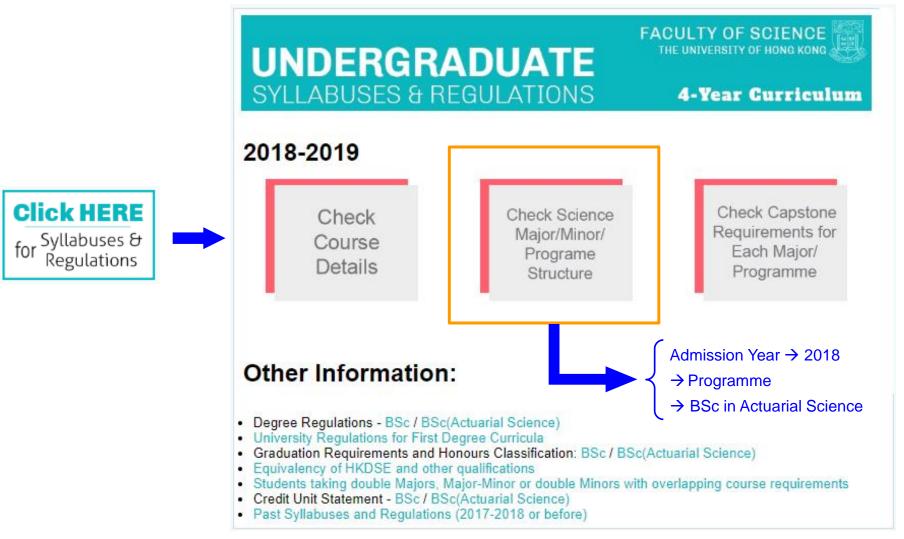
### Current Students

Search

- A BSc Degree Curriculum
- Academic Advising
- Calendar and Timetables
- Degree Regulations
- Download of Forms
- Examination
- FAQs
- Graduation Requirements
- Syllabuses

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

Undergraduate → Current Students → BSc (Actuarial Science)
→ Curriculum and Regulations → Syllabuses



### 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: Financial economics II (6) STAT3911 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

For Students → BSc(ActuarSc)



▶ BSc

▶ BSc(ActuarSc)

MStat

- Research Postgraduate
- Student Internship
- Student Intranet
- Scholarships
- Career Advising Programme (CAP)

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

### Courses

- Syllabuses & Regulations for BSc(ActuarSc)
- Actuarial Project / Directed Studies / Capstone Experience Courses (2018-19)
- 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)
- BSc(ActuarSc) first year timetable 2018-19 (Updated on August 6, 2018)
- Suggested BSc(ActuarSc) 4-year Curricular Structure (for students admitted in 2018) (Updated on August 6, 2018)
- Structure of Courses for BSc(Actuarial Science) (for students admitted in 2018) (Updated on August 6, 2018)

# **Academic Dates Terminology**

- 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:

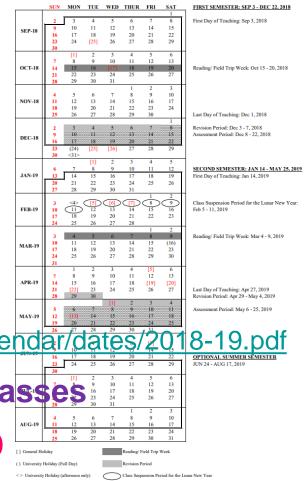
https://www.scifac.hku.hk/files/ug/current/calendar/dates/

Lectures and Tutorials/Example Classes

Important Academic Dates 2018-19

From Academic Advising Office (AAO):

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



# 2018-2019 First Semester

### Teaching Weeks 2018-19 for Undergraduate and Taught Postgraduate Students

	SUN	MON	TUE	WED	THUR	FRI	SAT
							1
	2	3	4	5	6	7	8
SEP-18	9	10	11	12	13	14	15
521-10	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
OCT-18	14	15	16	[17]	18	19	20
	21	22	23	24	25	26	27
	28	29	30	31			
	1				1	2	3
	4	5	6	7	8	9	10
NOV-18	11	12	13	14	15	16	17
	18	19	20	21	22	23	24
	25	26	27	28	29	30	
	1						1
	2	3	4	5	6	7	8
DEC-18	9	10	11	12	13	14	15
DEC-18	16	17	18	19	20	21	22
	23	(24)	[25]	[26]	27	28	29
	30	<31>					

### Teaching period

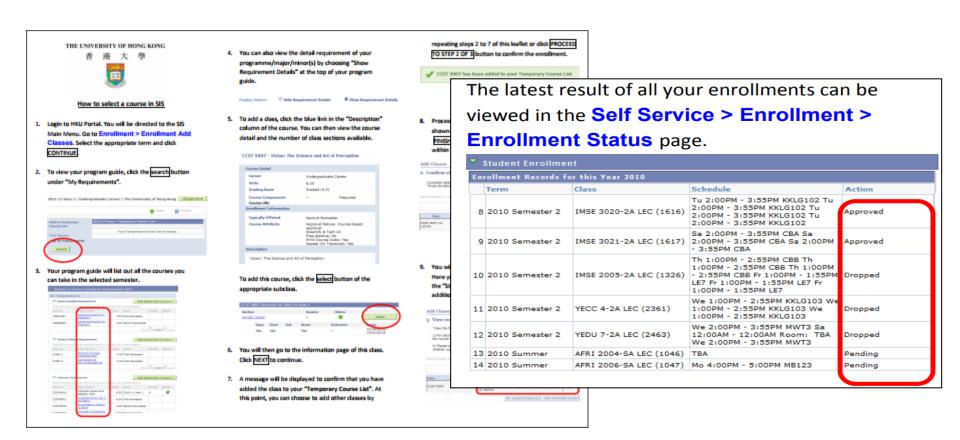
FIRST SEMESTER: SEP 3 - DEC 22, 2018	Week
First Day of Teaching: Sep 3, 2018	1
	2
Tutorial classes usually	3
start from the 2 <sup>nd</sup> week of teachir	ng <sup>4</sup>
(Follow instructions of individual cours	es) <sub>5</sub>
	6
Reading/ Field Trip Week: Oct 15 - 20, 2018	7(Reading)
	8
	9
	10
	11
	12
Last Day of Teaching: Dec 1, 2018	13
Assessment Period: Dec 8 - 22, 2018	14(Revision) 1 2 Break
	Divak

# **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:
   Undergraduate → Current Students → Forms & FAQs → Download of 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. K.P. Wat
  - RRS235
  - watkp@hku.hk
- Prof. K.C. Yuen
  - RRS231
  - kcyuen@hku.hk
  - Programme Director



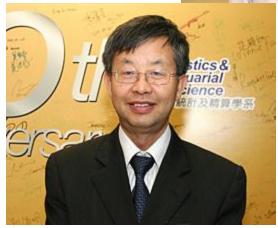


# Other Actuarial Teachers

- Dr. A.G. Benchimol
  - RRS120
  - benchi@hku.hk
- Dr. D. Lee
  - RRS120
  - leedav@hku.hk
- Prof. H. Yang
  - RRS232
  - hlyang@hku.hk







# 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)





Master's level

thesis

SAO

**Health and Care** 

Advanced

SA1

Life Insurance

Advanced

SA2

# **IFoA Curriculum 2019**



Investment and Finance Advanced

SA7

General Insurance Advanced

SA3

Pensions and

other benefits

Advanced

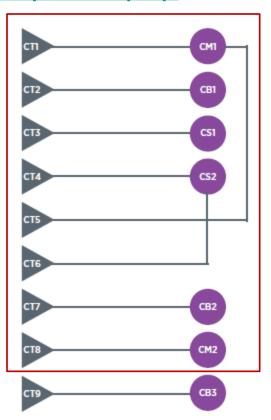
SA4



# 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 subjects (CS1-2, CM1-2, CB1-2)





# **SOA Curriculum 2018**



Qualification: Associate

INTRODUCTORYI	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	31713333		
EXAM FINANCIAL MATHEMATICS		STAT3906, STAT3908, STAT4903			
EXAM PROBABILITY STAT2001 STAT2002	VEE MATHEMATICAL STATISTICS	EXAM STATISTICS FOR RISK MODELING STAT3907, STAT4608, STAT4904	PROJECT PREDICTIVE ANALYTICS STAT4904		

YOU MUST COMPLETE 2 EXAMS BEFORE APPLYING TO VALIDATE YOUR EDUCATIONAL EXPERIENCE (EDUCATIONAL EXPERIENCES MAY HAVE OCCURRED PRIOR TO COMPLETING EXAMS

# **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



\* Credits earned for <u>VEE Applied Statistics</u> prior to July 1, 2018 may be claimed at any time and converted to VEE Mathematical Statistics and SRM Exam credit.

### 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.



# Other Graduation Requirements

- Other than taking Disciplinary Core and Elective courses
- 3 Language Courses
  - CAES1000 (Year 1)
  - CAES9820 (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://www.scifac.hku.hk/ug/current/ug-research-exchangeothers/exchange/current-students

Course Equivalence Database

HKU Title

Corporate

finance for

actuarial

science

Financial

economics

Risk theory I

Advanced life

contingencies

**Financial** 

Credibility

theory and loss distributions

Pension funds

and pension

mathematics

economics II

STAT3904

STAT3910

STAT3906

STAT3909

STAT3911

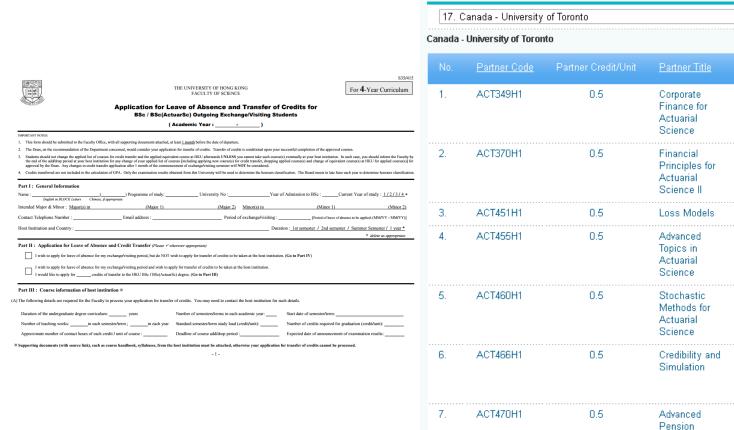
STAT3908

STAT3956

Mathematics

6

6



# <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	ternship Period	Oral Presentation and Report	
Year 2 Sem 1	Year 2 Sem 2	Year 3 Sem 1	Year 3 Sem 2	Year 4 Sem 1 Year 4 Sem 2 Deferred Year 5
9 10 11 12	1 2 3 4 5 6 7 8	9 10 11 12	1 2 3 4 5	6     7     8     9     10     11     12     1     2     3     4     5     6     7     8     9     10     11     12

- 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



# <u>University Resources</u>

- HKU Library
  - <u>lib.hku.hk</u>
- Exam Unit
  - www.exam.hku.hk
- CEDARS
  - www.cedars.hku.hk
- AAO
  - <u>aao.hku.hk</u>
- UHS
  - www.uhs.hku.hk
- IHP
  - www.ihp.hku.hk



