Dear Student,

Actuarial Science essentially deals with the education of insurance risks and Financial Management of Insurance Companies. It involves the application of Mathematics, Statistics and Economics in the decision-making process to a wide range of industries. The most prominent of these industries include insurance, investment, and financial planning & management companies. Actuaries are professionals who are qualified in this field through education and experience.

**Eligibility:**

In India, a fellow member of the Institute of Actuaries is known as an Actuary. To become a fellow, one has to first become a student member of the Institute and then clear all the papers of the Institute and fulfill other criteria from time to time. The eligibility criteria to appear for Actuarial papers are subjective. 10+2 passed students who have attained 85% marks in Mathematics / Statistics or graduate, or post-graduate students with 55% aggregate or more on Mathematics, Statistics are eligible to apply. There are a total of 15 papers and there is no fixed duration of the course. If pursued with complete dedication, the course could be completed in 3-4 years. The exams are conducted twice in a year in May/June and Oct/Nov. Thankfully there are no restrictions on the number of attempts per paper.

**ACET Actuarial Entrance Exam Pattern**

* 55 multiple choice questions of 100 marks
* Exam will be conducted online at a pre selected center at specific time slot.
* Negative marking half to weight age of marks for an incorrect answer.
* Scientific calculators like CASIOFX85, SHARP EL531 and TI-30 are allowed.

**Exam Pattern, Syllabus and Application Procedure for ACET**

Candidates who wish to become a student member of Institute of Actuaries of India are required to qualify the online entrance test conducted by the Institute. The entrance exam called as Actuarial Common Entrance Test or ACET comprises of objective type questions from Mathematics and Statistics. Higher secondary education with English as one of the subjects is the basic educational qualification required for this exam. One has to apply online for this exam.

**Exam pattern of Actuarial Common Entrance Test**

Actuarial Common Entrance Test is conducted by Institute of Actuaries of India in online mode across the country. The exam comprises of two papers such as Mathematics and Statistics. There will be a total of 55 multiple choice objective type questions in the exam. Of these 25 questions carry one mark each and next 25 questions carry 2 marks each. Last 5 questions carry 5 marks each. Candidates will be allotted 2 hours to answer all questions. Maximum marks allotted for the exam is 100. Half mark will be deducted for each wrong answer. Candidates are allowed to use scientific calculators in this exam. The detailed information regarding this can be obtained from the official website of Institute of Actuaries of India.

**Syllabus of ACET –**

* Mathematics
* Statistics
* English
* Data Interpretation
* Logical reasoning

Detailed syllabus can be found here

<http://www.actuariesindia.org/subMenu.aspx?id=381&val=Syllabus>

**Training Areas**

An Actuary looks into the future financial prospects of an insurance company. Actuaries use skills in mathematics, economics, computer science, finance, probability and statistics, and business to help businesses assess the risk of certain events occurring and to formulate policies that minimize the cost of that risk. For this reason, Actuaries are essential to the insurance and reinsurance industry, as staff employees or as consultants as well as to other businesses, including sponsors of pension plans and to the government. The Actuary’s certificate indicates a company’s ability to meet varying payments due at any time in future. He uses his professional skills to walk into the future and see how much income comes to the fund and how much expenses and benefit payments will go out of the fund of a company every year in future.

**Actuarial Science Main Examinations:**

These examinations are divided into 2 types – Written Examination and Practical Examination. The Written examinations are in four stages and they are given below –

Stage 1: Core Technical (CT)

* CT1 - Financial Mathematics
* CT2 - Finance and Financial Reporting
* CT3 - Probability and Mathematical Statistics
* CT4 - Models
* CT5 - General Insurance, Life and Health Contingencies
* CT6 - Statistical Methods
* CT7 - Business Economics
* CT8 - Financial Economics
* CT9 - Business Awareness Online Module (Practical Exam)

Stage 2: Core Application (CA)

* CA1 - Actuarial Risk Management
* CA2 - Model Documentation Analysis and Reporting (Practical Exam)
* CA3 - Communication (Practical Exam)

Stage 3: Specialist Technical (ST)

* ST1 - Health and Care
* ST2 - Life Insurance
* ST4 - Pension and Other Employee Benefits
* ST5 - Finance and Investment A
* ST6 - Finance and Investment B
* ST7 - General Insurance Reserving and Capital Modeling Specialist Technical
* ST8 - General Insurance Pricing Specialist Technical
* ST9 - Enterprise Risk Management

Stage 4: Specialist Application (SA)

* SA1 - Health and Care
* SA2 - Life Insurance
* SA3 - General Insurance
* SA4 - Pension and Other Employee Benefits
* SA5 - Finance
* SA6 – Investment

**Following are some of the other areas that Actuaries are trained on:**

1. Designing an insurance product and setting its price

2. Selecting the right people for insurance products.

3. Minimizing the number of losses for the company by reinsuring the company’s insurance policies with another insurer (called reinsurers)

4. Maximizing the profits for the company and thus protect the customers’ amounts kept with the insurance company for a number of years etc.

5. Preparing for a given date a summary of the company’s liabilities (commitments)

6. Determining the adequacy of the reserves.

7. Certifying the solvency of the Insurance Company

**Fee Structure:**

|  |  |  |
| --- | --- | --- |
| **S.No.** | **Subject** | **Fees** |
|  | **Core Technical Stage (CT)** | 2500 |
| 1 | CT1 - Financial Mathematics | 2500 |
| 2 | CT2 - 2 Finance and Financial Reporting | 2500 |
| 3 | CT3 - Probability and Mathematical Statistics | 2500 |
| 4 | CT4 – Models | 2500 |
| 5 | CT5 - General Insurance, Life and Health Contingencies | 2500 |
| 6 | CT6 - Statistical Methods | 2500 |
| 7 | CT7 - Business Economics | 2500 |
| 8 | CT8 - Financial Economics | 2500 |
|  | **Core Application Stage (CA)** |  |
| 9 | CA1 - Actuarial Risk Management | 7500 |
|  | **Specialist Technical Stage (ST)** |  |
| 10 | ST1 - Health and Care Insurance | 4000 |
| 11 | ST2 - Life Insurance | 4000 |
| 12 | ST4 - Pension and Other Employee Benefits | 4000 |
| 13 | ST5 - Finance and Investment A | 4000 |
| 14 | ST6 - Finance and Investment B | 4000 |
| 15 | ST7 - General Insurance : Reserving & Capital Modeling | 4000 |
| 16 | ST8 - General Insurance : Pricing | 4000 |
|  | **Specialist Applications Stage (SA)** |  |
| 17 | SA1 - Health and Care Insurance | 5000 |
| 18 | SA2 - Life Insurance | 5000 |
| 19 | SA3 - General Insurance | 5000 |
| 20 | SA4 - Pension and Other Employee Benefits | 5000 |
| 21 | SA5 – Finance | 5000 |
| 22 | SA6 – Investment | 5000 |

**Some colleges offering Actuarial Sciences in India are:**

Christ University, Bangalore

International School of Actuarial Sciences (ISAS), Hyderabad

Institute of Actuaries of India, Mumbai

Amity School of Insurance and Actuarial Science (ASIAS), Noida

C.M.D. School of Insurance and Actuarial Science

**Here are the career opportunities for the students who studied actuarial science both in India and abroad.**

Actuaries can play the following roles:

* + Risk Analysts
	+ Administrating Officer
	+ BPO Administrator
	+ Actuary Director
	+ Finance consultants in various Insurance sectors
	+ General Officer
	+ Financial Service Executive
	+ Appointed Actuary
	+ Actuarial Analyst
	+ Health care directors/managers/analysts
	+ Accounts manager
	+ Pension providing administrator other than in Insurance companies
	+ Senior Actuarial Analyst
	+ Asset Liability manager
	+ Financial/Insurance Consultants in IT sector
	+ Insurance risk managers
	+ Assistant Administrative Officer

Please click on the link given below to gain more understanding on the same:

<https://www.univariety.com/app/career/Business-Management/Actuarial-Science/aeb21fcd>

Hope this information was helpful. In case you have more queries you could reach out to us.

Regards,

Team Univariety!