M.Sc in the field of Food Safety and Toxicology

Proposed Credit Unit Statement

Aims

The MSc in the field of Food Safety and Toxicology aims to provide a comprehensive training on a multi-disciplinary field involving general toxicology, food toxicology, regulatory toxicology, and food safety management. The distinctive feature of this programme is its focus on food safety perspectives. It emphasizes basic knowledge as well as practical skills in recognition and evaluation of human exposure to potentially hazardous chemicals and pathogens, in our living environment and via dietary intake of foods. Special reference will be made to food safety evaluation and regulation

Curriculum design and content

The programme consists of six 9-12 credit core courses and one 12-credit capstone project course.

The first two courses (FSTX 7001 and 7002) present a core-base integrated knowledge of toxicology science, followed by the third course (FSTX 7003) which provides the applications of testing for hazard evaluation in food safety discipline. This information is essential for students to the basics of food quality systems. The fourth course (FSTX 7004) covers regulatory toxicology: risk assessment, management and communication, with role play as an important component. The fifth course (FSTX 8005) offers specific topics related to chemical and microbial hazards in food and the sixth course (FSTX 8006) provides students with real world industrial experience in food safety management systems.

- Each course is an intensive 2-week workshop (approximately 40 contact hours). Each course will be preceded by preparatory study (for which carefully-selected distance-learning material will be provided) and followed by consolidation and assessment. Teaching and learning processes may include traditional lectures, practical classes, discussion groups, tutorials, case studies, demonstrations and homework assignments. The expected total study load is 200-267 h for each course.

- Each course is self-contained and is individually assessed. Evaluation is a mix of written examination, case reports, homework assignments and/or presentations.

The final course (FSTX 8007) is a 5-month, independent research project (2 students per group) in which students will apply the basic knowledge on food safety, analytical techniques, critical

thinking and problem solving skills they have acquired to investigate a food safety-related issue. Students are required to submit a formal project report and do an oral presentation of their findings.

The award of an MSc degree in the field Food Safety and Toxicology is based on the accumulation of units obtained by taking all the prescribed courses.

Course code	**Course name**	**Credits**	**Total study load (in number of learning hours)**	**Total contact hours (formal scheduled teaching hours)**	**Total written output (lab report /assignments)**	**Coursework: Examination ratio**
FSTX 7001	Principles of toxicology I	9	210	30	Lab report (2 pages)	25:75
FSTX 7002	Principles of toxicology II	9	210	30	-	0:100
FSTX 7003	Toxicity tests and hazards evaluation methods	9	210	39	Lab reports (3-4 pages)	20:80
FSTX 7004	Regulatory toxicology: risk assessment, risk management and communication	12	280	48	Assignments (8-10 pages)	25:75
FSTX 8005	Chemical and microbial hazards in food	9	210	48	Lab reports (3-4 pages)	20:80
FSTX 8006	Food safety management	9	210	36	Assignments (8-10 pages)	15:85
FSTX 8007	Project	12	360	40	Minimum 8,000 words (excluding appendices and attachments)	100:0

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