University of Pretoria Yearbook 2018

BSc Culinary Science (02133320)

Minimum duration of study	4 years
Total credits	558

Admission requirements

- The following persons will be considered for admission: a candidate who is in possession of a certificate that is deemed by the University to be equivalent to the required Grade 12 certificate with university endorsement; a candidate who is a graduate from another tertiary institution or has been granted the status of a graduate of such an institution; and a candidate who is a graduate of another faculty at the University of Pretoria.
- Life Orientation is excluded in the calculation of the Admission Point Score (APS).
- Grade 11 results are used for the provisional admission of prospective students. Final admission is based on the Grade 12 results.

Minimum requirements												
Achievement level												
Afrikaans or English				**Mathematics**				**Physical Science**				**APS**
NSC/IEB	HIGCSE	AS-Level	A-Level	NSC/IEB	HIGCSE	AS-Level	A-Level	NSC/IEB	HIGCSE	AS-Level	A-Level	
5	3	C	C	5	3	C	C	5	3	C	C	30

Candidates who do not comply with the minimum admission requirements for BSc (Culinary Science), may be considered for admission to the BSc – Extended programme for the Biological and Agricultural Sciences. The BSc – Extended programme takes one year longer to complete.

BSc - Extended programme for the Biological and Agricultural Sciences:

Minimum requirements													
Achievement level													
	Afrikaans or English				**Mathematics**				**Physical Science**				**APS**
	NSC/IEB	HIGCSE	AS-Level	A-Level	NSC/IEB	HIGCSE	AS-Level	A-Level	NSC/IEB	HIGCSE	AS-Level	A-Level	
BSc – Extended programme for the Biological and Agricultural Sciences	4	3	D	D	4	3	D	D	4	3	D	D	24

Other programme-specific information

A student must pass all the minimum prescribed and elective module credits as set out at the end of each year within a programme as well as the total required credits to comply with the particular degree programme. Please refer to the curricula of the respective programmes. At least 144 credits must be obtained at 300-/400-level, or otherwise as indicated by curriculum. The minimum module credits needed to comply with degree requirements

is set out at the end of each study programme. Subject to the programmes as indicated a maximum of 150 credits will be recognised at 100-level. A student may, in consultation with the Head of Department and subject to the permission by the Dean, select or replace prescribed module credits not indicated in BSc three-year study programmes to the equivalent of a maximum of 36 module credits.

It is important that the total number of prescribed module credits is completed during the course of the study programme. The Dean may, on the recommendation of the Head of Department, approve deviations in this regard. Subject to the programmes as indicated in the respective curricula, a student may not register for more than 75 module credits per semester at first-year level subject to permission by the Dean. A student may be permitted to register for up to 80 module credits in a the first semester during the first year provided that he or she obtained a final mark of no less than 70% for grade 12 Mathematics and achieved an APS of 34 or more in the NSC.

Students who are already in possession of a bachelor's degree, will not receive credit for modules of which the content overlap with modules from the degree that was already conferred. Credits will not be considered for more than half the credits passed previously for an uncompleted degree. No credits at the final-year or 300- and 400-level will be granted.

The Dean may, on the recommendation of the programme manager, approve deviations with regard to the composition of the study programme.

Please note: Where elective modules are not specified, these may be chosen from any modules appearing in the list of modules.

It remains the student's responsibility to acertain, prior to registration, whether they comply with the prerequisites of the modules they want to register for.

The prerequisites are listed in the Alphabetical list of modules.

Promotion to next study year

A student will be promoted to the following year of study if he or she passed 100 credits of the prescribed credits for a year of study, unless the Dean on the recommendation of the head of department decides otherwise. A student who does not comply with the requirements for promotion to the following year of study, retains the credit for the modules already passed and may be admitted by the Dean, on recommendation of the head of department, to modules of the following year of study to a maximum of 48 credits, provided that it will fit in with both the lecture and examination timetable.

General promotion requirements in the faculty

All students whose academic progress is not acceptable can be suspended from further studies.

- A student who is excluded from further studies in terms of the stipulations of the abovementioned regulations, will be notified in writing by the Dean or Admissions Committee at the end of the relevant semester.
- A student who has been excluded from further studies may apply in writing to the Admissions Committee of the Faculty of Natural and Agricultural Sciences for re-admission.
- Should the student be re-admitted by the Admissions Committee, strict conditions will be set which the student must comply with in order to proceed with his/her studies.
- Should the student not be re-admitted to further studies by the Admissions Committee, he/she will be informed in writing.

- Students who are not re-admitted by the Admissions Committee have the right to appeal to the Senior Appeals Committee.
- Any decision taken by the Senior Appeals Committee is final.

Practical/clinical/internship information

OPI 400 (Experiential training in industry): During the first to fourth years of study, students must complete a total of 480 hours experiential training in the industry to develop practical and occupational skills, participate in community engagement and provide service learning. This is equal to 3 weeks x 40 hours (120 hours) per year, according to requirements as determine by the head of department. These “credits” include evidence of experiential training, service learning and community engagement during the four years of the study programme and must be successfully completed together with a complete portfolio before the degree will be conferred. Please note: Various practical and industry interaction activities support the theoretical component of VDS 414 & VDS 424, VDS 413 and FST 413 and take place after hours to develop practical and industry skills.

Pass with distinction

A student obtains his or her degree with distinction if a weighted average of at least 75% is obtained in the following modules:

Recipe development and standardisation 413

Consumer aspects of food 417

Food research project 480

Food service management 420

Food science and technology 413

Curriculum: Year 1

Minimum credits: 134

Minimum credits:

Fundamental = 12 credits

Core = 122 credits

Additional information:

Students who do not qualify for AIM 102 must register for AIM 111 and AIM 121.

Fundamental modules

Academic information management 102 (AIM 102)

Module credits	6.00
Service modules	Faculty of Education Faculty of Economic and Management Sciences Faculty of Humanities Faculty of Law Faculty of Health Sciences Faculty of Natural and Agricultural Sciences Faculty of Theology and Religion Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Department	Information Science
Period of presentation	Semester 2

Module content

Find, evaluate, process, manage and present information resources for academic purposes using appropriate technology. Apply effective search strategies in different technological environments. Demonstrate the ethical and fair use of information resources. Integrate 21st-century communications into the management of academic information.

Academic information management 111 (AIM 111)

Module credits	4.00

Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Economic and Management Sciences Faculty of Humanities Faculty of Law Faculty of Health Sciences Faculty of Natural and Agricultural Sciences Faculty of Theology and Religion
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Department	Information Science
Period of presentation	Semester 1

Module content

Find, evaluate, process, manage and present information resources for academic purposes using appropriate technology.

Academic information management 121 (AIM 121)

Module credits	4.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Economic and Management Sciences Faculty of Humanities Faculty of Law Faculty of Health Sciences Faculty of Natural and Agricultural Sciences Faculty of Theology and Religion Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Department	Informatics
Period of presentation	Semester 2

Module content

Apply effective search strategies in different technological environments. Demonstrate the ethical and fair use of information resources. Integrate 21st-century communications into the management of academic information.

Language and study skills 110 (LST 110)

Module credits	6.00
Service modules	Faculty of Natural and Agricultural Sciences Faculty of Veterinary Science

Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Unit for Academic Literacy
Period of presentation	Semester 1

Module content

The module aims to equip students with the ability to cope with the reading and writing demands of scientific disciplines.

Academic orientation 102 (UPO 102)

Module credits	0.00
Language of tuition	Afrikaans and English are used in one class
Department	Natural and Agricultural Sciences Deans Office
Period of presentation	Year

Core modules

Marketing Management 120 (BEM 120)

Module credits	10.00
Service modules	Faculty of Engineering, Built Environment and Information Technology
Contact time	3 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Department	Marketing Management
Period of presentation	Semester 2

Module content

This module provides an overview of the fundamentals of marketing by considering the exchange process, customer value, marketing research and the development of a marketing plan. It also addresses the marketing mix elements with specific focus on the seven service marketing elements namely the service product, physical evidence, people, process, distribution, pricing and integrated marketing communication.

Biometry 120 (BME 120)

Module credits	16.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Natural and Agricultural Sciences Faculty of Veterinary Science
Prerequisites	At least 4 (50-59%) in Mathematics in the Grade 12 examination, or at least 50% in both Statistics 113, 123
Contact time	1 practical per week, 4 lectures per week

Language of tuition	Separate classes for Afrikaans and English
Department	Statistics
Period of presentation	Semester 2

Module content

Simple statistical analysis: Data collection and analysis: Samples, tabulation, graphical representation, describing location, spread and skewness. Introductory probability and distribution theory. Sampling distributions and the central limit theorem. Statistical inference: Basic principles, estimation and testing in the one- and two-sample cases (parametric and non-parametric). Introduction to experimental design. One- and twoway designs, randomised blocks. Multiple statistical analysis: Bivariate data sets: Curve fitting (linear and non-linear), growth curves. Statistical inference in the simple regression case. Categorical analysis: Testing goodness of fit and contingency tables. Multiple regression and correlation: Fitting and testing of models. Residual analysis. Computer literacy: Use of computer packages in data analysis and report writing.

General chemistry 117 (CMY 117)

Module credits	16.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Health Sciences Faculty of Veterinary Science
Prerequisites	A candidate must have Mathematics for at least 60% and 60% for Physical Sciences.
Contact time	1 practical per week, 4 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Department	Chemistry
Period of presentation	Semester 1

Module content

General introduction to inorganic, analytical and physical chemistry. Atomic structure and periodicity. Molecular structure and chemical bonding using the VSEOR model. Nomenclature of inorganic ions and compounds. Classification of reactions: precipitation, acid-base, redox reactions and gas-forming reactions. Mole concept and stoichiometric calculations concerning chemical formulas and chemical reactions. Principles of reactivity: energy and chemical reactions. Physical behaviour gases, liquids, solids and solutions and the role of intermolecular forces. Rate of reactions: Introduction to chemical kinetics.

General chemistry 127 (CMY 127)

Module credits	16.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Health Sciences Faculty of Veterinary Science
Prerequisites	Natural and Agricultural Sciences students: CMY 117 GS or CMY 154 GS Health Sciences students: none

Contact time	1 practical per week, 4 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Department	Chemistry
Period of presentation	Semester 2

Module content

Theory: General physical-analytical chemistry: Chemical equilibrium, acids and bases, buffers, solubility equilibrium, entropy and free energy, electrochemistry. Organic chemistry: Structure (bonding), nomenclature, isomerism, introductory stereochemistry, introduction to chemical reactions and chemical properties of organic compounds and biological compounds, i.e. carbohydrates and aminoacids. Practical: Molecular structure (model building), synthesis and properties of simple organic compounds.

Physiology 110 (FSG 110)

Module credits	6.00
Service modules	Faculty of Humanities Faculty of Natural and Agricultural Sciences
Prerequisites	No prerequisites.
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Physiology
Period of presentation	Semester 1

Module content

Introduction (terminology and anatomical orientation); chemical principles; cytology and histology; neuro-physiology and the senses; haematology and body fluids; cardiovascular system.

Physiology 120 (FSG 120)

Module credits	6.00
Service modules	Faculty of Humanities Faculty of Natural and Agricultural Sciences
Prerequisites	FSG 110
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Physiology
Period of presentation	Semester 2

Module content

Respiratory system; nutrition; digestion and metabolism; kidneys and acid-base equilibrium; endocrinology; reproduction physiology and reproduction; skin and body temperatures.

Introduction to microbiology 161 (MBY 161)

Module credits	8.00
Service modules	Faculty of Engineering, Built Environment and Information Technology
Prerequisites	MLB 111 GS
Contact time	1 practical per week, 2 lectures per week
Language of tuition	Module is presented in English
Department	Microbiology and Plant Pathology
Period of presentation	Semester 2

Module content

The module will introduce the student to the field of Microbiology. Basic Microbiological aspects that will be covered include introduction into the diversity of the microbial world (bacteria, archaea, eukaryotic microorganisms and viruses), basic principles of cell structure and function, microbial nutrition and microbial growth and growth control. Applications in Microbiology will be illustrated by specific examples i.e. bioremediation, animal-microbial symbiosis, plant-microbial symbiosis and the use of microorganisms in industrial microbiology. Wastewater treatment, microbial diseases and food will be introduced using specific examples.

Molecular and cell biology 111 (MLB 111)

Module credits	16.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Health Sciences Faculty of Veterinary Science
Prerequisites	A candidate who has passed Mathematics with at least 60% in the Grade 12 examination
Contact time	1 practical per week, 4 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Department	Genetics
Period of presentation	Semester 1

Module content

Introductory study of the ultra structure, function and composition of representative cells and cell components. General principles of cell metabolism, molecular genetics, cell growth, cell division and differentiation.

Basic food preparation 111 (VDS 111)

Module credits	6.00
Service modules	Faculty of Health Sciences
Prerequisites	No prerequisites.
Contact time	0.5 practical per week, 1 discussion class per week, 1 lecture per week

Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Semester 1

Module content

Module 1: Basic food preparation and food preparation techniques. Mise en place, weighing and measurement techniques, equipment and terminology as applied in food preparation. History of the foodservice industry and contemporary chefs. Basic food quality control.
Module 2: Food preparation basics of the following: stocks, soups and sauces

Basic food preparation 121 (VDS 121)

Module credits	6.00
Service modules	Faculty of Health Sciences
Prerequisites	VDS 111
Contact time	1 lecture per week, 1 practical per week
Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Semester 2

Module content

Module 1: Principles and practices of food preparation and cooking techniques. Mise en place, weighing and measurement techniques, equipment and terminology as applied in food preparation. Basic food quality control.
Module 2: Food preparation basics of the following: starches and cereals

Mathematics 134 (WTW 134)

Module credits	16.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Veterinary Science
Prerequisites	Refer to Regulation 1.2: At least 50% for Mathematics in the Grade 12 examination .
Contact time	1 tutorial per week, 4 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Department	Mathematics and Applied Mathematics
Period of presentation	Semester 1

Module content

**Students will not be credited for more than one of the following modules for their degree: WTW 134, WTW 165, WTW 114, WTW 158. WTW 134 does not lead to admission to Mathematics at 200 level and is intended for students who require Mathematics at 100 level only. WTW 134 is offered as WTW 165 in the second semester only to students who have applied in the first semester of the current year for the approximately 65 MBChB, or the 5-6 BChD places becoming available in the second semester and who were therefore enrolled for MGW 112 in the first semester of the current year.*
Functions, derivatives, interpretation of the derivative, rules of differentiation, applications of differentiation, integration, interpretation of the definite integral, applications of integration. Matrices, solutions of systems of equations. All topics are studied in the context of applications.

Curriculum: Year 2

Minimum credits: 144

Minimum credits:

Core = 144 credits

Core modules

Introduction to proteins and enzymes 251 (BCM 251)

Module credits	12.00
Service modules	Faculty of Health Sciences
Prerequisites	CMY 117 GS and CMY 127 GS and MLB 111 GS
Contact time	2 lectures per week, 90 minute practical per week
Language of tuition	Afrikaans and English are used in one class
Department	Biochemistry
Period of presentation	Semester 1

Module content

Structural and ionic properties of amino acids. Peptides, the peptide bond, primary, secondary, tertiary and quaternary structure of proteins. Interactions that stabilise protein structure, denaturation and renaturation of proteins. Introduction to methods for the purification of proteins, amino acid composition, and sequence determinations. Introduction to enzyme kinetics and enzyme inhibition. Allosteric enzymes, regulation of enzyme activity, active centres and mechanisms of enzyme catalysis. Examples of industrial applications of enzymes. Practical training in laboratory techniques and Good Laboratory Practice. Techniques for the quantitative and qualitative analysis of biological molecules. Processing and presentation of scientific data.

Carbohydrate metabolism 252 (BCM 252)

Module credits	12.00
Service modules	Faculty of Education Faculty of Health Sciences
Prerequisites	CMY 117 GS and CMY 127 GS and MLB 111 GS
Contact time	2 lectures per week, 90 minute practical per week
Language of tuition	Afrikaans and English are used in one class
Department	Biochemistry
Period of presentation	Semester 1

Module content

Biochemistry of carbohydrates. Thermodynamics and bioenergetics. Glycolysis, citric acid cycle and electron transport. Glycogen metabolism, pentose-phosphate pathway, gluconeogenesis and photosynthesis. Practical training in study and analysis of metabolic pathways and enzymes. Scientific method and design: Hypothesis design and testing, method design and scientific controls.

Lipid and nitrogen metabolism 261 (BCM 261)

Module credits	12.00
Service modules	Faculty of Health Sciences
Prerequisites	CMY 117 GS and CMY 127 GS and MLB 111 GS
Contact time	2 lectures per week, 90 minute practical per week
Language of tuition	Afrikaans and English are used in one class
Department	Biochemistry
Period of presentation	Semester 2

Module content

Biochemistry of lipids, membrane structure, anabolism and catabolism of lipids. Nitrogen metabolism, amino acid biosynthesis and catabolism. Biosynthesis of neurotransmitters, pigments, hormones and nucleotides from amino acids. Catabolism of pureness and pyrimidines. Therapeutic agents directed against nucleotide metabolism. Examples of inborn errors of metabolism of nitrogen containing compounds. The urea cycle, nitrogen excretion. Practical training in scientific writing skills: evaluation of a scientific report. Techniques for separation and analysis of biological molecules

Biochemical principles of nutrition and toxicology 262 (BCM 262)

Module credits	12.00
Service modules	Faculty of Health Sciences
Prerequisites	CMY 117 GS and CMY 127 GS and MLB 111 GS
Contact time	2 lectures per week, 90 minute practical per week
Language of tuition	Afrikaans and English are used in one class
Department	Biochemistry
Period of presentation	Semester 2

Module content

Biochemistry of nutrition and toxicology. Proximate analysis of nutrients. Review of energy requirements and expenditure. Respiratory quotient. Requirements and function of water, vitamins and minerals. Interpretation and modification of RDA values for specific diets, eg growth, exercise, pregnancy and lactation, aging and starvation. Interactions between nutrients. Comparison of monogastric and ruminant metabolism. Cholesterol, polyunsaturated, essential fatty acids and dietary anti-oxidants. Oxidation of fats. Biochemical mechanisms of water- and fat-soluble vitamins and assessment of vitamin status. Mineral requirements, biochemical mechanisms, imbalances and diarrhoea. Biochemistry of xenobiotics: absorption, distribution, metabolism and excretion (ADME); detoxification reactions: oxidation/reduction (Phase I), conjugations (Phase II), export from cells (Phase III); factors affecting metabolism and disposition. Toxic responses: tissue damage and physiological effects, teratogenesis, immunotoxicity, mutagenesis and carcinogenesis. Examples of toxins: biochemical mechanisms of common toxins and their antidotes. Antibiotics and resistance. Natural toxins from fungi, plants and animals: goitrogens, cyanogens, cholineesterase inhibitors, ergotoxin, aflatoxins Practical training in analyses of nutrients, fatty acids separations, antioxidant determination, and enzyme activity measurements, PO ratio of mitochondria, electrophoresis, extraction, solubility and gel permeation techniques.

Consumer behaviour 212 (BEM 212)

Module credits	16.00
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Humanities Faculty of Natural and Agricultural Sciences
Prerequisites	BEM 120 GS
Contact time	3 lectures per week
Language of tuition	Afrikaans and English are used in one class
Department	Marketing Management
Period of presentation	Semester 1

Module content

Internal and external influencing factors of consumer behaviour, the consumer's decision process and application fields of consumer behaviour, consumerisms and social responsibility, buying behaviour of consumers in both product and service related industries, consumer psychology and the influence thereof on buying behaviour, psychology of pricing, influencing factors in consumer buying behaviour, the impact of various forms of marketing communication on buying behaviour.

Principles of food processing and preservation 260 (FST 260)

Module credits	12.00
Prerequisites	CMY 117, CMY 127, MBY 161, PHY 131 and WTW 134 or WTW 165 or TDH
Contact time	1 practical per week, 2 lectures per week
Language of tuition	Module is presented in English
Department	Food Science
Period of presentation	Semester 1 and Semester 2

Module content

Lectures: Food preservation technologies: concept of hurdle technology; heat (blanching, pasteurisation and sterilisation); cold (refrigeration and freezing); concentration and dehydration; food irradiation; fermentation; preservatives; new methods of food preservation. Effect of various food preservation technologies on the microbiological (shelf-life and safety issues), sensory and nutritional quality of foods. Practicals: Practical applications of above processes. Physical, chemical and sensory evaluation of processed foods. Assignment: Application of hurdle technology concept to a specific food product.

Bacteriology 251 (MBY 251)

Module credits	12.00
Service modules	Faculty of Engineering, Built Environment and Information Technology
Prerequisites	MBY 161 GS
Contact time	1 practical per week, 2 lectures per week
Language of tuition	Module is presented in English
Department	Microbiology and Plant Pathology
Period of presentation	Semester 1

Module content

Growth, replication and survival of bacteria, Energy sources, harvesting from light versus oxidation, regulation of catabolic pathways, chemotaxis. Nitrogen metabolism, iron-scavenging. Alternative electron acceptors: denitrification, sulphate reduction, methanogenesis. Bacterial evolution, systematic and genomics. Biodiversity; bacteria occurring in the natural environment (soil, water and air), associated with humans, animals, plants, and those of importance in foods and in the water industry.

Food microbiology 262 (MBY 262)

Module credits	12.00
Prerequisites	MBY 251
Contact time	1 practical per week, 2 lectures per week
Language of tuition	Module is presented in English
Department	Microbiology and Plant Pathology
Period of presentation	Semester 2

Module content

Primary sources of migroorganisims in food. Factors affecting the growth and survival of microorganisms in food. Microbial quality, spoilage and safety of food. Different organisms involved, their isolation, screening and detection. Conventional approaches, alternative methods rapid methods. Food fermentations: fermentation types, principles and organisms involved.

Consumer facilitation 222 (VBF 222)

Module credits	8.00
Contact time	1 lecture per week

Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Semester 2

Module content

Consumer decision making and consumer socialisation ; determinants of informed, responsible consumer decisions and consume satisfaction. Consumer education; development of consumer skills. Expenditure ptterns of the diverse South African consumer market and diverse market contexts. Consumerism. Globalisation.

Food commodities and preparation 210 (VDS 210)

Module credits	18.00
Service modules	Faculty of Health Sciences
Prerequisites	VDS 121
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Semester 1

Module content

Module 1: The study of different food systems with regard to food preparation. Physical and chemical properties and the influence of the composition in food preparation.
Module 2: Food preparation basics of the following: soups and sauces, fruit and vegetables; salads; frozen desserts; gelatine.
Module 3: Origin and development of food habits; Factors influencing habits and choice; Dynamics of food habits. Influence of religion on food habits. Food habits of different ethnic groups.

Food commodities and preparation 221 (VDS 221)

Module credits	18.00
Service modules	Faculty of Health Sciences
Prerequisites	VDS 210
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Semester 2

Module content

Module 1: The study of different food systems with regard to food preparation. Physical and chemical properties and the influence of the composition in food preparation.
Module 2: Food preparation basics of the following: meat; poultry; fish, legumes, eggs and milk, baked products (whole spectrum); leavening agents.
Module 3: The influence of culture on cuisines. Study of the cuisines of selected African, European and Eastern countries.

Curriculum: Year 3

Minimum credits: 140

Minimum credits:

Core = 140 credits

Core modules

Food chemistry 351 (FST 351)

Module credits	18.00
Prerequisites	BCM 251 and BCM 252 and BCM 261 and BCM 262 or TDH
Contact time	1 practical per week, 2 lectures per week
Language of tuition	Module is presented in English
Department	Food Science
Period of presentation	Semester 1

Module content

Lectures - Chemistry of major food components: Carbohydrates. Proteins. Lipids. Water. Chemical and nutritional aspects of food processing: implications of different processing techniques on the major food components. Functional properties of the major food components. Modification of functional properties of the major food components. Food analysis methodology. Practical work: Food analysis.

Food chemistry (2) 352 (FST 352)

Module credits	18.00
Prerequisites	BCM 251 and BCM 252 and BCM 261 and BCM 262 or TDH
Contact time	1 practical per week, 2 lectures per week
Language of tuition	Module is presented in English
Department	Food Science
Period of presentation	Semester 1

Module content

Lectures - Basic food analysis and chemistry of the minor food components: Basic food analysis, vitamins, minerals, additives, contaminants. Chemical and nutritional aspects of food processing: implications of different processing techniques on minor food components. Functional properties of the minor food components. Food analysis methodology. Practical work: Food analysis.

Food service management 321 (VDB 321)

Module credits	18.00
Service modules	Faculty of Health Sciences

Prerequisites	Natural and Agricultural Sciences students: VDS 322 #
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Semester 2

Module content

Planning and layout of food service units for different food service systems. Equipment for food services. Factors influencing the choice and purchasing of equipment for different food service units. Hygiene and safety in food services. management in food service systems. Financial management in food services.

Nutrition 311 (VDG 311)

Module credits	17.00
Prerequisites	No prerequisites.
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Semester 1

Module content

The study of nutrients and water regarding their chemical composition, characteristics, basic digestion, absorption, metabolism, functions, food sources and symptoms of deficiency and toxicity. Energy metabolism. Dietary recommendations and guidelines, dietary guides and meal planning. The use and application of food composition tables in dietary analysis.

Nutrition during life cycle 321 (VDG 321)

Module credits	17.00
Prerequisites	[FSG 110 and FSG 120] and VDG 311
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Semester 2

Module content

The role of nutrition in the life cycle. The role of nutrition in the prevention of lifestyle related diseases - osteoporosis, cancer, coronary heart disease, tooth decay. Vegetarianism. Different conditions of malnutrition: Protein Energy Malnutrition and obesity.

Consumer food research 310 (VDS 310)

Module credits	21.00

Prerequisites	VDS 221
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Semester 1

Module content

Planning executing and reporting consumer food research. Food preservation and evaluation techniques. Experiments in food, emphasizing ingredient function and standard preparation methods. Application of experimental methods through which the chemical and physical reactions of food to different food handling, preparation and preservation techniques are illustrated. Quality evaluation and consumer orientated sensory evaluation of food products.

Large-scale food production and restaurant management 322 (VDS 322)

Module credits	31.00
Service modules	Faculty of Health Sciences
Prerequisites	VDS 210 and VDS 221
Contact time	3 lectures per week, 3 practicals per week
Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Semester 2

Module content

Module 1: Restaurant management. Table setting, table serving, wine service, food and wine pairing, beverage management
Module 2: Menu planning for different food service systems and styles of food service.
Module 3: Large scale food procurement, consumption and storage.
Practical work: Principles of large-scale food preparation and the practical application thereof in a practical restaurant situation. Recipe formats and adjustment applicable to large-scale food preparation. Work scheduling and the practical exposure to the use of large scale catering equipment in a real life situation.

Curriculum: Final year

Minimum credits: 178

Minimum credits:

Core = 178 credits

Additional information:

OPI 400 (Experiential training in industry): During the first to fourth years of study, students must complete a total of 480 hours experiential training in the industry to develop practical and occupational skills, participate in community engagement and provide service learning. This is equal to 3 weeks x 40 hours (120 hours) per year, according to requirements as determine by the head of department. These “credits” include evidence of experiential training, service learning and community engagement during the four years of the study programme and must be successfully completed together with a complete portfolio before the degree will be conferred. Please note: Various practical and industry interaction activities support the theoretical component of VDS 414 & VDS 424, VDS 413 and FST 413 and take place after hours to develop practical and industry skills.

Core modules

Sensory evaluation 412 (FST 412)

Module credits	10.00
Prerequisites	FST 260, FST 351 and FST 352 or TDH
Contact time	12 discussion classes, 6 practicals per semester
Language of tuition	Module is presented in English
Department	Food Science
Period of presentation	Semester 1

Module content

Principles and applications of sensory evaluation. Types of panels, tests and test conditions and their functions. Selection and training of panellists for descriptive sensory evaluation. Instrumental sensory quality measurements. Statistical analysis and interpretation of data. Practicals: Practical aspects and execution of sensory evaluation techniques, analysis and interpretation of data. Instrumental sensory quality measurements.

Experiential training in industry 400 (OPI 400)

Module credits	5.00
Prerequisites	Documentation of work experience as required for years 1-3
Contact time	1 practical per week
Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Semester 2

Module content

During the first to fourth years of study students must complete a total of 600 hours experiential training in the industry to develop practical and occupational skills, participate in community engagement and provide service learning. . This is equal to 3 weeks x40 hours (120 hours) per year for the first to third year and 6 weeks x 40 hours in the fourth year to include event management, according to requirements as determine d by the head of department. These "credits" include evidence of experiential training, service learning and community engagment during the four years of the degree programme and must be successfully completed together with a complete portfolio before the degree will be conferred. Please note: Various practical and industry- interaction activities support the theoretical component of VDS 322, 413, 414, 417, 424, 427, FST 412 and TBE 311 (as applicable to the respective Consumer Science programmes) and take place after hours to develop practical and industry skills,

Research project 400 (VBR 400)

Module credits	30.00
Prerequisites	BEM 314 and Final-year status
Contact time	1 lecture per week, 1 practical per week
Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Year

Module content

Research methodology. Planning, executing and reporting a research project in clothing retail management; food retail management, hospitality management or culinary science.

Food service management 420 (VDB 420)

Module credits	21.00
Prerequisites	VDB 321 GS and ABV 320
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Semester 1

Module content

The professional food service manager’s roles, responsibilities and characteristics. Contemporary leadership and management styles in food service systems. Professionalism and ethics. Advanced food service systems and production management techniques and training facilitation. Marketing of food services.

Recipe development and standardisation 413 (VDS 413)

Module credits	30.00
Prerequisites	VDS 310 or VDS 322
Contact time	2 practicals per week, 3 lectures per week

Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Semester 1

Module content

Recipe development process. Development of appropriate recipes and food products for a given situation. Standardisation of recipes. Food styling and food photography.

Culinary art 414 (VDS 414)

Module credits	22.00
Prerequisites	VDS 322
Contact time	2 lectures per week, 2 practicals per week
Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Semester 1

Module content

Advanced food preparation and presentation techniques. Event planning and banqueting.

Culinary art 424 (VDS 424)

Module credits	22.00
Prerequisites	VDS 414
Contact time	2 lectures per week, 2 practicals per week
Language of tuition	Afrikaans and English are used in one class
Department	Consumer Science
Period of presentation	Semester 2

Module content

Advanced food preparation and presentation techniques. Event planning and banqueting.

The information published here is subject to change and may be amended after the publication of this information. The General Regulations (G Regulations) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the General Rules section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.