

# 4 YEARS PROGRAMME COURSE STRUCTURE (8 SEMESTERS)

	Year 1		Year 2		Year 3		Year 4	
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8

## UH6541002 FOOD SCIENCE AND NUTRITION

Course Structure Session 2021/2022	<b>UNIVERSITY CORE (PROMOTION OF KNOWLEDGE)</b> (12 Credit Hours)	<b>UW00702</b> (FIS)  <b>ULXXXX2</b> (Liberal Study 1)  <b>ULXXXX2</b> (Liberal Study 2)  <b>(6 Credit Hours)</b>	<b>UW00802</b> (PEDP)  <b>ULXXXX2</b> (Liberal Study 3)  <b>(4 Credit Hours)</b>	<b>UW00302</b> (APK)  <b>(2 Credit Hours)</b>					
	<b>UNIVERSITY CORE (LANGUAGE)</b> (8 Credit Hours)	<b>UBXXXX2</b> (Language 1)  <b>(2 Credit Hours)</b>	<b>UBXXXX2</b> (Language 2)  <b>(2 Credit Hours)</b>	<b>UBXXXX2</b> (Language 3)  <b>(2 Credit Hours)</b>	<b>UBXXXX2</b> (Language 4)  <b>(2 Credit Hours)</b>				
	<b>UNIVERSITY CORE (CO-CURRICULUM)</b> (3 Credit Hours)	<b>EXXXXX3</b> (Co-Curriculum)  <b>(3 Credit Hours)</b>							

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## UH6541002 FOOD SCIENCE AND NUTRITION

<b>Course Structure Session 2021/2022</b>	<b>FACULTY CORE</b> (56 Credit Hours)	<b>NT10102</b> Fundamentals of Food Science and Nutrition  <b>NT10502</b> General Microbiology  <b>NT10902</b> Organic Chemistry  <b>NT11603</b> Basic Financial Management	<b>NT10202</b> General Physics  <b>NT10402</b> Analytical Chemistry  <b>NT10802</b> Biochemistry  <b>NT11202</b> Calculus  <b>NT11403</b> Fundamentals of Marketing  <b>NT11503</b> Management Principles and Practices	<b>NT20703</b> Food Analysis and Instrumentation  <b>NT20903</b> Food Chemistry and Biochemistry  <b>NT21103</b> Statistics  <b>NT21303</b> Physical Properties of Food	<b>NT20203</b> Food Microbiology  <b>NT20803</b> Post-Harvest Handling Technology	<b>NT30503</b> Industry Revolution and Research Methodology  <b>NT30703</b> Food Safety and Quality Control  <b>NT30903</b> Food Preservation and Processing  <b>NT31103</b> Food Sensory Evaluation	<b>NT40103</b> Food Legislation and Standards
		(9 Credit Hours)	(14 Credit Hours)	(12 Credit Hours)	(6 Credit Hours)	(12 Credit Hours)	(3 Credit Hours)

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## UH6541002 FOOD SCIENCE AND NUTRITION

<b>Course Structure Session 2021/2022</b>	<b>PROGRAMME CORE</b> (51 Credit Hours)			<b>NP20303</b> Human Nutrition  <b>NP20002</b> Food Habits  <b>NP20003</b> Nutrition through the Life Cycle  <b>NP20603</b> Functional Food  <b>NP20403</b> Food Production Ecosystem	<b>NP20003</b> Nutrition through the Life Cycle  <b>NP20603</b> Functional Food  <b>NP20403</b> Food Production Ecosystem	<b>NP30203</b> Nutritional Assessment  <b>NP30302</b> Food Security	<b>NP31003</b> Food Toxicology  <b>NP30803</b> Food Innovation  <b>NP30403</b> Enzymes in Food Processing  <b>NP00202</b> Research Project I	<b>NP40503</b> Food Ingredients and Uses  <b>NP00306</b> Research Project II	<b>NP40012</b> Industrial Training
				(5 Credit Hours)	(9 Credit Hours)	(5 Credit Hours)	(11 Credit Hours)	(9 Credit Hours)	(12 Credit Hours)

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	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8

UH6541002 FOOD SCIENCE AND NUTRITION									
<b>*ELECTIVES</b> (8 Credit Hours)							*NE4XXX2 (Elective 1)  *NE4XXX2 (Elective 2)  <b>(4 Credit Hours)</b>  <b>(Module 1)</b>	*NE4XXX2 (Elective 3)  *NE4XXX2 (Elective 4)  <b>(4 Credit Hours)</b>  <b>(Module 2)</b>	
<b>TOTAL CREDIT HOURS</b> (138 Credit Hours)	20	20	21	17	17	15	16	12	

**\*Elective Courses**

\*Each student is required to complete a total of four elective courses (8 credit hours), two from **Module 1 (Nutrition Module)** and two from **Module 2 (Food Technology and Bioprocessing Module)**. The courses for **Module 1** and **Module 2** are listed in the following table. Only selected courses will be offered for a particular semester depending on the availability of the lecturers teaching the courses.

Module 1 – Nutrition Module (Choose any two that are being offered*)	Module 2 - Food Technology and Bioprocessing Module (Choose any two that are being offered*)
<b>NE40002</b> Nutrition Education	<b>NE40702</b> Dairy Science and Technology
<b>NE40102</b> Diet Therapy	<b>NE40802</b> Meat Science and Technology
<b>NE40202</b> Food Hydrocolloids	<b>NE40902</b> Bakery and Confectionery Technology
<b>NE40402</b> Nutritional Content of Food	<b>NE41002</b> Halal Food Production
<b>NE40502</b> Molecular Nutrition	<b>NE41102</b> Fats and Oils Technology
<b>NE40602</b> Food Service	<b>NE41402</b> Marine and Aquaculture Products

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	Year 1		Year 2		Year 3		Year 4	
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8

## UH6541004 FOOD TECHNOLOGY AND BIOPROCESSING

Course Structure Session 2021/2022	<b>UNIVERSITY CORE (PROMOTION OF KNOWLEDGE) (12 Credit Hours)</b>	<b>UW00702</b> (FIS)  <b>ULXXXX2</b> (Liberal Study 1)  <b>ULXXXX2</b> (Liberal Study 2)  <b>(6 Credit Hours)</b>	<b>UW00802</b> (PEDP)  <b>ULXXXX2</b> (Liberal Study 3)  <b>(4 Credit Hours)</b>	<b>UW00302</b> (APK)  <b>(2 Credit Hours)</b>						
	<b>UNIVERSITY CORE (LANGUAGE) (8 Credit Hours)</b>	<b>UBXXXX2</b> (Language 1)  <b>(2 Credit Hours)</b>	<b>UBXXXX2</b> (Language 2)  <b>(2 Credit Hours)</b>	<b>UBXXXX2</b> (Language 3)  <b>(2 Credit Hours)</b>	<b>UBXXXX2</b> (Language 4)  <b>(2 Credit Hours)</b>					
	<b>UNIVERSITY CORE (CO-CURRICULUM) (3 Credit Hours)</b>	<b>EXXXXX3</b> (Co-Curriculum)  <b>(3 Credit Hours)</b>								

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	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8

## UH6541004 FOOD TECHNOLOGY AND BIOPROCESSING

Course Structure Session 2021/2022	<b>FACULTY CORE (56 Credit Hours)</b> <b>NT10102</b> Fundamentals of Food Science and Nutrition  <b>NT10502</b> General Microbiology  <b>NT10902</b> Organic Chemistry  <b>NT11603</b> Basic Financial Management  <b>(9 Credit Hours)</b>	<b>NT10202</b> General Physics  <b>NT10402</b> Analytical Chemistry  <b>NT10802</b> Biochemistry  <b>NT11202</b> Calculus  <b>NT11403</b> Fundamentals of Marketing  <b>NT11503</b> Management Principles and Practices  <b>(14 Credit Hours)</b>	<b>NT20703</b> Food Analysis and Instrumentation  <b>NT20903</b> Food Chemistry and Biochemistry  <b>NT21103</b> Statistics  <b>NT21303</b> Physical Properties of Food  <b>(12 Credit Hours)</b>	<b>NT20203</b> Food Microbiology  <b>NT20803</b> Post-Harvest Handling Technology  <b>(6 Credit Hours)</b>	<b>NT30503</b> Industry Revolution and Research Methodology  <b>NT30703</b> Food Safety and Quality Control  <b>NT30903</b> Food Preservation and Processing  <b>NT31103</b> Food Sensory Evaluation  <b>(12 Credit Hours)</b>	<b>NT40103</b> Food Legislation and Standards  <b>(3 Credit Hours)</b>		
	<b>PROGRAMME CORE (52 Credit Hours)</b>		<b>NB20502</b> Food Enzymology  <b>NB20703</b> Human Nutrition  <b>(5 Credit Hours)</b>	<b>NB20003</b> Unit Operations in Food Processing  <b>NB20403</b> Bioprocessing Technology  <b>NB20603</b> Food Packaging  <b>(9 Credit Hours)</b>	<b>NB30502</b> Food Ingredient  <b>NB30703</b> Food Fermentation  <b>NB30903</b> Food Engineering  <b>(8 Credit Hours)</b>	<b>NB00202</b> Research Project I  <b>NB30804</b> Food Product Development  <b>NB31003</b> Novel Food Processing  <b>(9 Credit Hours)</b>	<b>NB00306</b> Research Project II  <b>NB40703</b> Bioseparation  <b>(9 Credit Hours)</b>	<b>NB40012</b> Industrial Training  <b>(12 Credit Hours)</b>

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	Year 1		Year 2		Year 3		Year 4	
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8

### UH6541004 FOOD TECHNOLOGY AND BIOPROCESSING

	UH6541004 FOOD TECHNOLOGY AND BIOPROCESSING							
*ELECTIVES (8 Credit Hours)						NE4XXX2* (Elective 1)  NE4XXX2* (Elective 2)  (4 Credit Hours)	NE4XXX2* (Elective 3)  NE4XXX2* (Elective 4)  (4 Credit Hours)	
TOTAL CREDIT HOURS (139 Credit Hours)	20	20	21	17	20	13	16	12

**\*Elective Courses**

\*Each student is required to complete a total of four elective courses (8 credit hours), two from **Module 1 (Nutrition Module)** and two from **Module 2 (Food Technology and Bioprocessing Module)**. The courses for **Module 1** and **Module 2** are listed in the following table. Only selected courses will be offered for a particular semester depending on the availability of the lecturers teaching the courses.

Module 1 – Nutrition Module (Choose any two that are being offered*)	Module 2 - Food Technology and Bioprocessing Module (Choose any two that are being offered*)
NE40002 Nutrition Education	NE40702 Dairy Science and Technology
NE40102 Diet Therapy	NE40802 Meat Science and Technology
NE40202 Food Hydrocolloids	NE40902 Bakery and Confectionery Technology
NE40302 Food Security	NE41002 Halal Food Production
NE40402 Nutritional Content of Food	NE41102 Fats and Oils Technology
NE40502 Molecular Nutrition	NE41202 Functional Foods
NE40602 Food Service	NE41302 Food Toxicology
	NE41402 Marine and Aquaculture Products

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	Year 1		Year 2		Year 3		Year 4	
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8

UH6541001 FOOD SERVICE									
Course Structure Session 2021/2022	<b>UNIVERSITY CORE (PROMOTION OF KNOWLEDGE)</b> (12 Credit Hours)	<b>UW00702</b> (FIS)  <b>ULXXXX2</b> (Pengajian Liberal 1)  <b>ULXXXX2</b> (Pengajian Liberal 2)  <b>(6 Credit Hours)</b>	<b>UW00802</b> (PEDP)  <b>ULXXXX2</b> (Pengajian Liberal 3)  <b>(4 Credit Hours)</b>	<b>UW00302</b> (APK)   <b>(2 Credit Hours)</b>					
	<b>UNIVERSITY CORE (LANGUAGE)</b> (8 Credit Hours)	<b>UBXXXX2</b> (Language 1)  <b>(2 Credit Hours)</b>	<b>UBXXXX2</b> (Language 2)  <b>(2 Credit Hours)</b>	<b>UBXXXX2</b> (Language 3)  <b>(2 Credit Hours)</b>	<b>UBXXXX2</b> (Language 4)  <b>(2 Credit Hours)</b>				
	<b>UNIVERSITY CORE (CO-CURRICULUM)</b> (3 Credit Hours)	<b>EXXXXX3</b> (Co-Curriculum)   <b>(3 Credit Hours)</b>							





# 4 YEARS PROGRAMME COURSE STRUCTURE (8 SEMESTERS)

	Year 1		Year 2		Year 3		Year 4		
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8	
	<b>UH6541001 FOOD SERVICE</b>								
<b>Course Structure Session 2021/2022</b>	<b>PROGRAMME CORE (63 Credit Hours)</b>	<b>NF10102</b> Fundamentals of Food Service	<b>NF10003</b> Eastern and Western Cookery  <b>NF10203</b> Food Service Entrepreneurship	<b>NF20303</b> Human Nutrition  <b>NF20502</b> Food and Culture	<b>NF20203</b> Molecular Gastronomy  <b>NF20202</b> International Business	<b>NF30103</b> Menu Development  <b>NF30503</b> Food Service Accounting	<b>NF00202</b> Research Project I  <b>NF30203</b> Commercial Food Preparation  <b>NF30603</b> Food Service System and Operation  <b>NF30403</b> Arrangement, Design and Equipment for Food Service	<b>NF00306</b> Research Project II  <b>NF40302</b> Quantity Food Purchasing  <b>NF40703</b> Special Topics  <b>NF40503</b> Quantity Food Preparation  <b>NF40502</b> Diet Therapy	<b>NF40012</b> Industrial Training
		(2 Credit Hours)	(6 Credit Hours)	(5 Credit Hours)	(5 Credit Hours)	(6 Credit Hours)	(11 Credit Hours)	(16 Credit Hours)	(12 Credit Hours)
<b>TOTAL CREDIT HOURS (138 Credit Hours)</b>	<b>19</b>	<b>16</b>	<b>21</b>	<b>16</b>	<b>21</b>	<b>14</b>	<b>19</b>	<b>12</b>	

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	Year 1		Year 2		Year 3		Year 4	
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8

Course Structure Session 2021/2022	UH6541003 NUTRITION								
	<b>UNIVERSITY CORE (PROMOTION OF KNOWLEDGE)</b> (12 Credit Hours)	<b>UW00702 (FIS)</b> (2 Credit Hours)	<b>UW00802 (PEDP)</b> (2 Credit Hours)	<b>UW00302 (APK)</b> <b>ULXXXX2 (KIK1)</b> (4 Credit Hours)	<b>ULXXXX2 (KIK2)</b> (2 Credit Hours)	<b>ULXXXX2 (KIK3)</b> (2 Credit Hours)			
	<b>UNIVERSITY CORE (LANGUAGE)</b> (8 Credit Hours)	<b>UBXXXX2</b> (Language 1) (2 Credit Hours)	<b>UBXXXX2</b> (Language 2) (2 Credit Hours)	<b>UBXXXX2</b> (Language 3) (2 Credit Hours)	<b>UBXXXX2</b> (Language 4) (2 Credit Hours)				
	<b>UNIVERSITY CORE (CO-CURRICULUM)</b> (3 Credit Hours)	<b>EXXXXX3</b> (Co-Curriculum) (3 Credit Hours)							
	<b>FACULTY CORE (10 Credit Hours)</b>	<b>NT10102</b> Fundamentals of Food Science and Nutrition  (2 Credit Hours)	<b>NT10802</b> Biochemistry  (2 Credit Hours)	<b>NT20703</b> Food Analysis and Instrumentation  (3 Credit Hours)	<b>NT20203</b> Food Microbiology  (3 Credit Hours)				

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	Year 1		Year 2		Year 3		Year 4	
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8

## UH6541003 NUTRITION

Course Structure Session 2021/2022	UH6541003 NUTRITION							
	<b>PROGRAMME CORE</b>  <b>(106 Credit Hours)</b>	<b>NN10104</b> Anatomy and Physiology  <b>NN10303</b> Principles of Human Nutrition  <b>NN10503</b> Foundations of Communication  <b>(10 Credit Hours)</b>	<b>NN10003</b> Pathophysiology  <b>NN10202</b> Introduction to Psychology  <b>NN10403</b> Basic Pharmacology  <b>NN10603</b> Biostatistics  <b>(11 Credit Hours)</b>	<b>NN20103</b> Behaviour and Health  <b>NN20303</b> Nutrition through the Life Cycle  <b>NN20503</b> Principles of Food Preparation  <b>(9 Credit Hours)</b>	<b>NN20004</b> Nutritional Status Assessment  <b>NN20203</b> Nutritional Anthropology  <b>NN20403</b> Immunology  <b>NN20604</b> Advanced Nutrition  <b>(14 Credit Hours)</b>	<b>NN30104</b> Clinical Nutrition  <b>NN30303</b> Nutrition for Sports and Physical Activity  <b>NN30503</b> Food and Nutrition Policies  <b>NN30702</b> Nutrition Programme Planning  <b>NN30904</b> Research Methods and Scientific Communication  <b>(16 Credit Hours)</b>	<b>NN00206</b> Research Project I  <b>NN30204</b> Community Nutrition  <b>NN30403</b> Nutrition Education, Promotion and Communication  <b>(13 Credit Hours)</b>	<b>NN00306</b> Research Project II  <b>NN40303</b> Contemporary Issues in Nutrition and Health  <b>NN40503</b> Food Service Management  <b>NN40703</b> Seminar and Industrial Revolution  <b>(15 Credit Hours)</b>

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<b>UH6541003 NUTRITION</b>								
*ELECTIVES (4 Credit Hours)						NEXXXX2* (2 Credit Hours)	NEXXXX2* (2 Credit Hours)	
<b>TOTAL CREDIT HOURS (143 Credit Hours)</b>	<b>19</b>	<b>17</b>	<b>18</b>	<b>21</b>	<b>18</b>	<b>15</b>	<b>17</b>	<b>18</b>

**\*Elective Courses**

\*Each student is required to complete a total of at least two elective courses (at least a total of 4 credit hours) from any Module. The courses for Module 1, Module 2 and Module 3 are listed in the following table. Only selected courses will be offered for a particular semester depending on the availability of the lecturers teaching the courses.

Module 1 – Nutrition		Module 2 – Food Technology and Bioprocessing		Module 3 – Nutrition Programme Electives	
Code	Courses	Code	Courses	Code	Courses
NE40402	Nutritional Content of Foods	NE41202	Functional Foods	NE30603	Health Care Management
		NE41302	Food Toxicology	NE30803	Food Safety and Regulation
		NE41402	Marine and Aquaculture Products	NE31002	Genetics and Nutrition
				NE31103	Nutritional Epidemiology
				NE41502	Health Promotion
				NE41702	Ethics and Professionalism for Nutritionists
				NE41902	Food Culture of Borneo