

**Faculty of Agriculture & Plantation Management**  
**Wayamba University of Sri Lanka**

**Master of**  
**Agri-Enterprise & Technology Management**

**Overview of Program Structure, Content and Options**

The duration of the proposed 'Master of Agri-Enterprise & Technology Management' degree [M.(AETM)] program is one Academic Year. The 'Academic Year' consists of 02 Semesters of 15 weeks each and academic program is based on 'Course Credit System', where the students will be assessed continuously throughout the semester (i.e. formative) and end-semester evaluation (i.e. summative) will be held at the end of teaching of each course. The students will be informed about the type and schedule of continuous assessment at the beginning of each course unit.

In order to qualify for the award of degree the prospective student is required to earn a total of 30 Credits, which contributes to the final grade (GPA course units) and successful completion of all the courses which are not contributed to final grade (i.e. 04 Non-GPA course units). The breakdown of course based on the Semester and Levels is summarized below.

An alpha numeric code is used to identify a course unit. The code consists of four digits prefixed by the two letters, namely MAS, to denote 'Masters'. Then the respective Concentration is denoted, i.e. (1) Agri-Food Economics & Business [AB]; (2) Biosystems Technology [BS]; (3) Biotechnology [BT]; (4) Food Production & Manufacturing [FM]; (5) Lifestyle Agriculture [LA], and (6) Plantation Agriculture [PA].

The first digit denotes the 'Year' at which the course unit is offered and the second digit denotes the 'Semester' in which the course unit is offered. The third digit denotes the 'Serial Number' assigned for the course unit. The last digit denotes the 'Number of Credits' assigned for GPA course units. For Non-GPA course units, zero (0) has been assigned for the last digit.

### **Course Schedule**

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Course Schedule for the proposed M.(AETM) degree program, including the Subjects (Code, Name, GPA/NGPA Credits, Total Contact Hours) for an academic year (i.e. 2 Semesters with 30 Credit Load) to satisfy the SLQF Level 7 to 9 (Note: T: Theory; P: Practical; IL: Independent learning)

#### **Semester I**

- All the students should follow the **THREE COURSES** included under the **Functional Expertise Knowledge Segment** in Level 7 – Semester I (i.e. those courses denoted as CC) for 06 Credits.

- Each student should select **THREE COURSES** included under the **Elective Expertise Knowledge Segment** in Level 7 – Semester I (i.e. those courses specified under six Concentrations denoted as AB, BS, BT, FM, LA, PA) for 09 Credits. In doing so, the student possesses the options of selecting: (a) **ALL THREE COURSES** from **ANY SINGLE CONCENTRATION** OR (b) **TWO COURSES** from **ANY SINGLE CONCENTRATION** and the **OTHER COURSE** from **ANY OTHER CONCENTRATION** of interest (subject to the approval of the Board of Study with regard to the potential conflicts in parallel teaching sessions, student’s knowledge and experience etc.).
- The student must complete the course specified under the **Application Competency Development Segment** (Level 7) for 01 Non-GPA Credit.

### Semester II

- All the students should follow the **TWO COURSES** included under the **Functional Expertise Knowledge Segment** in Level 7 – Semester II (i.e. those courses denoted as CC) for 05 Credits.
- Each student should select **TWO COURSES** included under the **Elective Expertise Knowledge Segment** in Level 7 – Semester II (i.e. those courses specified under six Concentrations denoted as AB, BS, BT, FM, LA, PA) for 04 Credits. In doing so, the student possesses the options of selecting: (a) **BOTH COURSES** from the **SAME CONCENTRATION** that he/she has selected subjects in Semester I OR (2) **ONE COURSE** from the **SAME CONCENTRATION** that he/she selected subjects in Semester I and the **OTHER COURSE** from **ANY OTHER CONCENTRATION** of interest (subject to the approval of the Board of Study with regard to the potential conflicts in parallel teaching sessions, student’s knowledge and experience etc.).
- The student must complete the Courses specified under the **Application Competency Development Segment** (Level 8); **Analytical Competency Development Segment** (Level 9), and the **Industry Exposure Segment** (Level 9) for 06 Credits and 03 Non-GPA Credits.

Subject Code	Subject Name	GPA Credits	NGPA Credits	Contact Hours T: P: IL
<b>SLQF Level 7</b>				
<b>Year 1 - Semester I</b>				
<b>Functional Expertise Knowledge Segment</b>				
MAS-CC 71012	Trends & Perspectives in Food & Agriculture	2	-	30:00:70
MAS-CC 71022	Climate Smart Agriculture: Concepts & Applications	2	-	30:00:70
MAS-CC 71032	Bio Resources & Soil Nutrient Management	2	-	30:00:70

<b>Elective Expertise Knowledge Segment</b>				
<b><i>Agri-Food Economics &amp; Business Concentration</i></b>				
MAS-AB 71013	Supply Chain Management in Food & Agribusiness	3	-	40:10:100
MAS-AB 71023	Economics of Quality Management in Food & Agricultural Products	3	-	40:10:100
MAS-AB 71033	Advanced Trade Policy Analysis	3	-	40:10:100
<b><i>Biosystems Technology Concentration</i></b>				
MAS-BS 71013	Instrumentation and Control Applications in Agriculture	3	-	40:10:100
MAS-BS 71023	Geo-Informatics for Agriculture and Environmental Management	3	-	40:10:100
<b><i>Biotechnology Concentration</i></b>				
MAS-BT 71013	Microbial Resources and Industrial Biotechnology	3	-	40:10:100
MAS-BT 71023	Molecular and Omics Biology	3	-	40:10:100
MAS-BT 71033	Plant Biotechnology for Advancement in Agriculture	3	-	40:10:100
<b><i>Food Production &amp; Manufacturing Concentration</i></b>				
MAS-FM 71013	Advanced Food Processing and Preservation Technologies	3	-	40:10:100
MAS-FM 71023	Plant Bioactive Compounds and Human Health Benefits	3	-	40:10:100
MAS-FM 71033	Sustainable Fisheries and Aquaculture Product Management	3	-	40:10:100
<b><i>Lifestyle Agriculture Concentration</i></b>				
MAS-LA 71013	Modern Postharvest Technology	3	-	40:10:100
MAS-LA 71023	Environmental Horticulture	3	-	40:10:100
MAS-LA 71033	High Yielding Farming	3	-	40:10:100
<b><i>Plantation Agriculture Concentration</i></b>				
MAS-PA 71013	Plantation Produce Forecasting and Monitoring	3	-	40:10:100
MAS-PA 71023	Spatial Technologies for Plantation Agriculture	3	-	40:10:100
MAS-PA 71033	Sustainable Management Process for Certification in Plantations	3	-	40:10:100
<b>Application Competency Development Segment</b>				
MAS-CC 71040	Life & Professional Skills Development I	0	1	10:10:30
<b><i>Semester I - Total</i></b>		<b>15</b>	<b>01</b>	<b>220:40:540</b>
<b>Year 1 - Semester II</b>				
<b>Functional Expertise Knowledge Segment</b>				

MAS-CC 72013	Results-based Project Management & Evaluation	3	-	40:10:100
MAS-CC 72022	Food Security & Vulnerability Assessments: Theory & Practice	2	-	30:00:70
<b>Application Competency Development Segment</b>				
MAS-CC 72030	Life & Professional Skills Development II	0	1	10:10:30
<i>Sub Total</i>		<b>05</b>	<b>02</b>	<b>80:20:200</b>
<i>Total SLQF Level 7</i>		<b>20</b>	<b>02</b>	<b>300:60:740</b>
<b>SLQF Level 8</b>				
<b>Year 1 - Semester II (Continued)</b>				
<b>Elective Expertise Knowledge Segment</b>				
<b><i>Agri-Food Economics &amp; Business Concentration</i></b>				
MAS-AB 72012	Applied Demand & Market Analysis	2	-	30:00:70
MAS-AB 72022	Modern Marketing Strategy for Agri-Food Business	2	-	30:00:70
<b><i>Biosystems Technology Concentration</i></b>				
MAS-BS 72012	Cleaner Production & Green Technologies	2	-	30:00:70
MAS-BS 72022	Energy Management for Sustainable Agriculture	2	-	30:00:70
<b><i>Biotechnology Concentration</i></b>				
MAS-BT 72012	Animal Biotechnology and Bioethics	2	-	30:00:70
MAS-BT 72022	Computational Biology	2	-	30:00:70
<b><i>Food Production &amp; Manufacturing Concentration</i></b>				
MAS-FM 72012	Managing Postharvest Longevity of Agricultural Produce	2	-	30:00:70
MAS-FM 72022	Chemical Residue Free Agricultural Production	2	-	30:00:70
<b><i>Lifestyle Agriculture Concentration</i></b>				
MAS-LA 72012	Seeds and Plant Genetic Resources	2	-	30:00:70
MAS-LA 72022	Urban Agriculture	2	-	30:00:70
<b><i>Plantation Agriculture Concentration</i></b>				
MAS-PA 72012	Legal Environment for Conflicts Resolution in Plantations	2	-	30:00:70
MAS-PA 72022	e-Agriculture Applications for Plantations	2	-	30:00:70
<b>Application Competency Development Segment</b>				
MAS-CC 72031	Integrated Learning Portfolio (ILP)	1	0	00:00:60
MAS-CC 72040	Entrepreneurial Leadership	0	2	20:20:60

<i>Sub Total for SLQF 8</i>		<i>05</i>	<i>02</i>	<i>80:20:260</i>
<i>Total for SLQF 7 &amp; 8</i>		<i>25</i>	<i>04</i>	<i>380:80:1000</i>
<b>SLQF Level 9</b>				
<b>Year 1 - Semester II (Continued)</b>				
<b>Analytical Competency Development Segment</b>				
MAS-CC 72052	Master's Seminar on Topical Issues in the World of Food & Agriculture	2	0	00:00:100
<b>Industry Exposure Segment</b>				
MAS-CC 72063	Master's Work Integrated Learning (WIL)	3	0	00:00:300
<i>Sub Total for SLQF 9</i>		<i>05</i>	<i>00</i>	
<i>Total Credits (SLQF 7, 8 &amp; 9)</i>		<i>30</i>	<i>04</i>	<i>380:80:1400</i>