ALEX EKWUEME FEDERAL UNIVERSITY NDUFU-ALIKE, EBONYI STATE, NIGERIA (AE-FUNAI)

DEPARTMENT OF AGRIBUSINESS AND MANAGEMENT

PROPOSED CURRICULUM

FOR

POSTGRADUATE PROGRAMME IN MASTER OF SCIENCE (M.Sc.) DEGREE IN AGRIBUSINESS AND MANAGEMENT (WITH SPECIALIZATION IN FOOD VALUE CHAIN MANAGEMENT)

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1.0 Background of the Programme

Agriculture occupies a central position in Nigeria's economy, contributing significantly to employment and gross domestic product. Despite the significant contribution, the agricultural sector's performance has not fully met the nation's needs, with food production continually falling short of demand. This has resulted in structural deficits in the supply of major commodities and highlighted the need for a strategic overhaul.

The essence of agriculture in Nigeria encompasses both food security and agribusiness dimensions—the former being largely driven by social utility and the latter by private profit. As the foundational pillar of food systems, agriculture plays a crucial role in providing food, raw materials, income for farmers, employment opportunities, and foreign exchange. This dual importance underscores the government's commitment to the sector's development, aiming to ensure the increased availability and affordability of nutritious food sustainably.

However, the path to realizing these goals has been hindered by challenges including limited uptake of productivity-enhancing technologies; low agricultural productivity and value addition due to insufficient research, innovation, and extension services; poor-quality inputs; poor access to finance and markets; and policy implementation bottlenecks.

The Nigerian agricultural sector's landscape has witnessed an increase in private sector involvement, coupled with a gradual reduction in government intervention. This aligns with the Comprehensive Africa Agriculture Development Programme (CAADP) pillars and principles. Despite these strides towards self-sufficiency many agricultural commodities have seen less progress in their development and promotion, crucial for commercialization, food and nutrition security in the nation.

Furthermore, the lack of value addition in agricultural products is a significant challenge. A critical examination reveals that the agribusiness and food value chains in Nigeria is underdeveloped, characterized by fragmented supply chains, inadequate infrastructure, and a lack of integration between the various segments of production, processing, and distribution. Most agricultural produce in Nigeria is sold as raw materials with minimal processing or branding, which considerably reduces its potential value. This situation is compounded by inadequate infrastructure, such as processing facilities, and logistical challenges, leading to post-harvest losses and diminished product quality by the time it reaches consumers.

Additionally, there's a broader challenge related to the agribusiness environment itself. Issues such as limited access to finance for agribusinesses, inadequate market information, and poor access to technology for productivity enhancement directly affect the ability of producers to meet consumer needs effectively. These challenges also hinder the development of robust value chains that could facilitate better integration of production, processing, and distribution, thereby enhancing the overall quality and availability of value-added agricultural products.

Addressing these challenges necessitates a concerted effort to enhance agribusiness education and training, focusing on equipping professionals with the knowledge and skills to innovate and adapt to market needs. There is a clear need for programmes that not only tackle the technical aspects of agriculture but also emphasize market-oriented strategies, consumer

behavior understanding, and value chain development. By focusing on these areas, it is possible to bridge the gap between production and market demand, ensuring that agricultural products are aligned with consumer expectations and market trends.

Recognizing these challenges and the strategic importance of agriculture to Nigeria's socio-economic development, the Faculty of Agriculture at Alex Ekwueme Federal University, Ndufu-Alike, Ebonyi State, Nigeria (AEFUNAI) proposes a master's degree programme in Agribusiness with Specialization in Food Value Chain Management. This innovative programme is carefully designed to bridge the knowledge and skill gaps in Nigeria's agricultural sector. It aims to cultivate a cadre of agribusiness professionals equipped with the expertise to revitalize and sustainably manage agricultural value chains. Situated within a region boasting significant agricultural activity, the University is uniquely positioned to lead this transformative educational endeavor, leveraging its academic excellence, research capabilities, and strategic partnerships.

2.0 Rationale for the Programme

Previous agricultural policies such as the Agricultural Transformation Agenda (ATA), and the Agriculture Promotion Policy (APP), have laid the groundwork for addressing these challenges, with specific objectives aimed at promoting agribusiness and value chains, achieving food security, strengthening research and innovation, and enhancing the standardization and market access of agricultural produce. However, implementation challenges have stifled the anticipated productivity and investment boosts in the agricultural sector, primarily due to technological and knowledge deployment inefficiencies, policy implementation discord, and limited private sector engagement.

The lessons learned from past policies and strategies have informed the development of the National Agricultural Technology and Innovation Policy (NATIP), which aims to leverage 21st-century knowledge and practices to accelerate agricultural development. The strategic direction of the current policy encompasses a mission to deploy cutting-edge knowledge and attract significant investments into agriculture and agribusiness, creating a diversified economy that ensures access to nutritious food, growth, and employment opportunities across agricultural value chains.

In the wake of the existing policies and persistent challenges, the imperative for skill and manpower development in Nigeria's agricultural sector has become increasingly apparent. The agricultural sector's transition towards a technologically driven, market-oriented model demands professionals skilled not only in modern agricultural techniques but also in food value chain management. Also, consumers' needs are of vital importance, hence satisfying consumers' need through value addition to their goods and services along the chain is not negotiable. To achieve efficient food value chain management, food value chain managers that periodically assess consumer needs and production from raw material supply to finish products are important to resolve inconsistencies in the food value chain. To this end a well-trained and sufficiently informed human resource to manage the activities in the different nodes of food value chain is highly needed. This skill set is pivotal for driving innovation,

productivity, and ensuring Nigeria's agricultural competitiveness globally, aligning with current policies' vision for a revitalized, sustainable sector.

In response to this, the master's degree programme in Agribusiness with Specialization in Food Value Chain Management at Alex Ekwueme Federal University, Ndufu-Alike, Ebonyi State, Nigeria (AEFUNAI) emerges as a strategic imperative. Such a programme is envisioned to bridge the gap between policy aspirations and their operationalization, preparing a new generation of agribusiness professionals to lead and innovate within Nigeria's agricultural sector. This initiative aligns with the government's broader economic goals of food security, export diversification, and employment generation, marking a significant step towards harnessing the agricultural sector's potential in driving Nigeria's economic development.

The need for such skilled manpower is the main motivation for establishing a Master of Science (M.Sc) degree programme in Agribusiness with Specialization in Food Value Chain Management as part of the CHAIN project. The programme is designed to produce innovative value chain managers, transition managers, consultants, researchers, quality assurance inspectors, capacity building experts, project/programme managers, policymakers with the needed skills and knowledge to drive agribusiness and food value chain development in Nigeria and elsewhere.

3.0 Philosophy

The philosophy underlying the programme of Agribusiness combines the study of agriculture, business, and management with the aim of producing students with understanding of the economic and business principles that underlie management and their applications to Agriculture and allied businesses. The philosophy of the M.Sc. degree programme in Agribusiness and Management is guided by:

- our holistic perspective on agribusiness which embraces the entire food value chain from farm to fork;
- the concept of adopting an interdisciplinary approach for training in agribusiness and management;
- understanding that sustainable practices in agribusiness, should take into consideration environmental, social, and economic sustainability; and
- our recognition that the interconnectedness of various components within agribusiness (including input supply, production, processing, marketing, and consumption) is necessary for food security and sustainable development.

4.0 Vision

The vision of the M.Sc. degree programme in Agribusiness with Specialization in Food Value Chain Management is to provide competence-based training in food value chain management that will become a standard globally.

5.0 Mission of the University

To train top quality human resource that will propel the development of the country by equipping the graduates with the relevant knowledge and skills required in the marketplace in a globalized world. To take a leading role in fostering the economic development of Ebonyi State and the entire Nigerian society at large through specific education, training, and outreach activities.

6.0 Objectives of the Programme

The overall goal of the Postgraduate programme in Agribusiness and Management is to produce proficient, highly competent and innovative agribusiness and food value chain experts capable of leading the commercialization of the country's agriculture in light of the dynamism of consumer's demand.

The specific objectives of the program are to:

i. expose students to advanced courses in relevant areas of agribusiness management.

ii. train managers who can apply inter-disciplinary approaches in solving agribusiness problems.

iii. equip students with research skills needed to deal with problems facing agribusiness development in developing countries.

iv. train future food value chain facilitators and managers, programme coordinators, transition and innovation managers, policymakers, food quality inspectors, researchers, food value chain consultants, and capacity builders who will take leading roles in the world's agricultural, environmental, and food sectors.

v. train experts who will drive sustainable agricultural commercialization in the country and beyond; and

vi. raise experts who can plan and manage agribusinesses, design policies relevant to agribusiness development, and engage in community development services.

7.0. Admission Requirements

1a. Candidates seeking admission for any postgraduate degree programme in Agribusiness must possess five O/level Credit passes obtained in GCE ordinary level, SSCE, or NECO in not more than two sittings to include: English Language, Mathematics, Economics or Chemistry, Biology (or Agriculture) and any other one subject from: (i) Government/History (ii) Accounting (iii) Christian Religious Knowledge (iv) Geography (v) Commerce (vi) Literature in English (vii) Physics. Also note that the combination of two results of GCE O' level, SSCE, and NECO is accepted provided it gives a candidate at least five subjects. In addition GCE A/L passes or its equivalent in Economics and at least one of the following: (i) Business Management (ii) Accounting (iii) Mathematics (iv) Government (v) Geography.

1b. Bachelor of Science (B.Sc.) degree in Agribusiness and Management, Bachelor of Agriculture (B. Agric.) degree in Agricultural Economics with a minimum Cumulative

Grand Point Average (CGPA) of 2.50 on 5.00 points scale or 2.00 on a 4.00 point scale from a recognized University in or outside Nigeria.

2. Candidates with Animal Science, Crop Science, Soil Science, Forestry and Wildlife, and Fisheries and Aquaculture degrees with a minimum CGPA as above in addition to the O/level requirement in 1a above should take and pass all 400 Level courses of Agribusiness and Management as compensatory courses before proceeding to the Agribusiness Master programme.

3. Candidates with postgraduate diploma from a recognized university with a minimum of Lower Credit (CGPA of 2.50) in Agribusiness and Management, Agricultural Economics may be considered in addition to the O/level requirement in 1a above.

4. All eligible candidates may be required to take and pass an entrance examination (written and/or oral) to be considered for admission.

5. Candidates with PASS grade in first degree, HND, ND or Postgraduate Diploma are NOT qualified for admission.

8.0 Programme Structure and Duration

The M.Sc. degree programme in Agribusiness and Management (with different areas of Specialization including **Food Value Chain Management**) will be by both course work and research. It will run on both full-time and part-time bases. The duration of the programme is as follows:

a. **Full time Structure**

1. Minimum of 3 semesters
2. Maximum of 6 semesters

However, an extension of a maximum of six (6) months beyond the maximum period may be approved by the Senate on recommendation of the Postgraduate School Board.

A minimum of two semesters will be required for course work. Upon completion of course work, a student shall not proceed to dissertation writing stage unless he/she has obtained a minimum Cumulative Grade Point Average (CGPA) of 3.00.

A student must record a minimum of 75% attendance in the course lectures to qualify for the final examination on the course. Meeting this requirement will be based on the Course Lecturer's attendance record.

Results of examinations must be presented to the Postgraduate School Board at the end of each semester for consideration and recommendation. The results will eventually be presented to the University Senate for approval.

b. **Part time Structure**

1. Minimum of 4 semesters

2. Maximum of 8 semesters

However, an extension of a maximum of twelve (12) months beyond the maximum period may be approved by the Senate on recommendation of the Postgraduate School Board.

A minimum of two semesters will be required for course work. Upon completion of course work, a student shall not proceed to dissertation writing stage unless he/she has obtained a minimum Cumulative Grade Point Average (CGPA) of 3.00.

A student must record a minimum of 75% attendance in the course lectures to qualify for the final examination on the course. Meeting this requirement will be based on the Course Lecturer's attendance record.

Results of examinations must be presented to the Postgraduate School Board at the end of each semester for consideration and recommendation. The results will eventually be presented to the University Senate for approval.

9.0 Graduation Requirements

Candidates are required to pass all the courses specified in this curriculum before graduation. The total credit load for all the courses is 34 units. These include 23 units of core/taught courses, 2 units of seminar, 3 units of agribusiness incubation experience, and 6 units of dissertation. A student can only defend his/her dissertation if s/he has paid all her/his fees and passed all courses including agribusiness incubation experience and seminar.

10.0 Degree Nomenclature

Students who have successfully completed graduation requirements can earn the following degree: Master of Science (M.Sc.) degree in Agribusiness (Specialization in Food Value Chain Management).

11.0 Grading

Grading for all courses and dissertation taken under this Master's degree programme shall be as follows:

A - 70% and above
B - 60% - 69%
C - 50% - 59%
F - 0% - 49%

The pass mark for all the courses and dissertation is 50%. Any score lower than this shall be recorded as Failure and the course must be re-taken/repeated at the next available opportunity.

12.0 Course Profile

The course profile for the programme is presented as follows:

12.1. Course coding

The courses offered in the programme will have the code **'ABM'** (except where a course is borrowed from another programme in the University) followed by a three-digit figure. The first digit represents the level, the second digit represents stress/specialization area, and the last digit represents the semester (odd numbers represent first semester and even numbers represent second semester).

Stress/Specialization Area Coding for Agribusiness and Management Courses

0 = Agribusiness and Management (General)

1 = Food Value Chain Management Option

2 = Agribusiness Finance and Investment Option

3 = Agribusiness and Entrepreneurship Development Option

4 = Agribusiness Project Management Option

5 = Agri-Food Policy Systems Option

6 = Export Management Option

7 = Food Security and Climate Change Option

8 = Dissertation

12.2. Distribution of courses by year and semester
Food Value Chain Management Option

Year One: First Semester

Course Code	Course Title	Credit Unit
ABM 801	Advanced Statistical Methods and Econometrics for Agribusiness	3
ABM 803	Managerial Economics in Agribusiness	2
ABM 805	Agricultural Marketing and Agribusiness Organization Management	3
ABM 811	Food Value Chain Management	2
ABM 813	Food Processing Technology	2
ABM 807	Principles of Agripreneurship and Product Development	2
ABM 821	Financial Management, Strategy and Institutions	2
	Total credit	**16**

Year One: Second Semester

Course Code	Course Title	Credit Unit
ABM 802	Research Methods in Agribusiness and Management	3
ABM 804	Agribusiness and Value Chain Incubation	3
ABM 806	Seminar	2
ABM 812	Crop, Livestock and Fish Value Chain Management	2
ABM 814	Sustainability for Commodity and Food Value Chains	2
ABM 808	Digital Technology for Agri-food System	2
ABM 844	Agribusiness Policy and e-business	2
	Total credit	**16**

Year Two

Course Code	Course Title	Credit Unit
ABM 880	M.Sc. Dissertation	6
	Total credit	**6**
	Grand Total	**38**

12.3. Course descriptions

ABM 801 Advanced Statistical Methods and Econometrics for Agribusiness 3 Units

Course Description

This course will expose graduates on types and dimensions of data analysis, the choice of different econometric and statistical tools for agribusiness and food value chain research, the assumptions for the choice of each technique, practical application (using statistical and econometric softwares) of each technique in agribusiness and food value chain research. Students will learn how to use statistical and econometric tools to make informed decisions in the agricultural and food industries.

Course Objectives

The broad objective of this course is to expose students to advanced statistical methods and econometric tools for conducting high-quality research studies in agribusiness and in making agribusiness management decisions. Upon completion of this course, students will be able to:

- discuss types and dimensions of data analysis in agribusiness and social research;
- understand and critique different statistical and econometric tools for agribusiness and food value chain research;
- analyse the assumptions underlying the choice of each statistical and econometric tools for agribusiness and food value chain research;
- estimate and interpret results of each statistical and econometric tools;
- generate and store data in computer mediums and perform appropriate data analysis; and
- interpret and present results of the data analysis.

Course Content

Levels of measurement. Data processing and quality control. Statistical data and their presentation. Types and dimensions of data analysis. Descriptive statistics - Measures of central tendency and dispersion. Probability and probability distributions. Hypothesis testing. Regression and correlation analyses. Problems in regression analysis (e.g., multicollinearity, heteroscedasticity, autocorrelation, errors in variables). Principal component and factor analysis. Non-parametric statistics. Simultaneous equations modeling. Time series and panel data analyses. Using computer applications/statistical software to carry out data analysis.

Mode of Course Delivery

This course will be delivered through lectures, training on use of some statistical and econometric softwares, assignments, brainstorming sessions, crossover discussion, field survey and presentation.

Assessment Method

There will be at least two continuous assessments which will account for 30% of the evaluation. There will be one final exam. The exam will account for 70% of the total score.

ABM 803 Managerial Economics in Agribusiness 2 Units

Course Description

The course, which combines economic principles and theories in making business decisions, is designed to guide students and managers alike with the skills required to make real-time decisions relating to firm's customers, competitors, and internal operations.

Course Objectives

On completion of this course, students and managers will be able to:

- understand the fundamentals, nature and objectives of managerial economics;
- understand and apply basic principles in managerial economics in business decisions;
- understand theories of demand and supply, and use necessary tools to analyze demand and supply decisions as well as forecasting the demand and supply of agri-food products;
- analyze the different production relationships in agribusiness decisions;
- analyze agribusiness products costs using appropriate tools;
- conduct managerial decision analysis using different approaches;
- understand and apply pricing policies/strategies using different methods; and
- analyze externalities associated with agribusinesses.

Course Content

Fundamentals, nature and objectives of managerial economics; basic principles in managerial economics; theories of demand and supply, factors affecting each and computation methods; theory of production theory and examples of the different production relationships – factor-product relationship, factor-factor relationship, and product-product relationship; managerial decision analysis and approaches; theory of cost; pricing policy and methods; externalities, public goods, and the role of governments.

Mode of Course Delivery

This course will be delivered through lectures, assignments, brainstorming sessions, and presentations.

Assessment Method

There will be at least two continuous assessments which will account for at least 30% of the evaluation. There will be one final exam. The exam will account for 70% of the total score.

ABM 805 Agricultural Marketing and Agribusiness Organization Management 3 Units

Course Description

This course is designed to guide students understand and make informed decisions about agricultural markets and marketing. The course also aims at examining decisions in managing agribusiness organizations and their overall relevance to agricultural commercialization.

Course Objectives

The general objective of this course is to enhance students' knowledge, skill and attitude that support commercialization of agricultural products for the satisfaction of consumers. It is also aimed at equipping students with different skills and approaches of managing agribusiness organizations. After completion of this course, students will be able to:

- explain the concept of marketing, markets, market systems and characteristics;

- analyze agricultural market challenges and approaches, and nexus between food and agricultural industry;
- understand the essence of market liberalization, and analyze government's role in market liberalization and the implications in agribusiness development;
- conduct market research to identify viable agribusiness opportunities;
- conduct market integration analysis;
- analyze market information system;
- explain international trade and analyze the policy instruments;
- understand agribusiness organization management;
- explain the forms of agribusiness organizations and cooperatives;
- analyze organizational behavior and its relevance in human resource management; and
- understand how to mobilize resources for agribusiness organizations and apply budgeting techniques.

Course Content

Concept of marketing, markets, market systems and characteristics; agricultural market challenges and approaches, and nexus between food and agricultural industry; market liberalization; market research; market integration analysis; market information system; international trade and the policy instruments; agribusiness organization management; forms of agribusiness organizations and cooperatives; organizational behaviour; strategic human resource management; agribusiness resource mobilization and budgeting.

Mode of Course Delivery

This course will be delivered through lectures, case studies, assignments, brainstorming sessions, presentation, and demonstration.

Assessment Method

Continuous assessment; this will be based on active participation in discussions of case-based tasks, assignments, presentations, and will account for at least 30% of the evaluation. The remaining goes for final exam.

ABM 811 Food Value Chain Management 2 Units

Course Description

This course is designed to enhance students' skills and knowledge of agricultural value chain analysis and development, enabling environment analysis for agricultural value chain development, as well as governance framework for agribusiness development.

Course Objectives

The aim of the course is to increase the knowledge, capacity and skills of students in agribusiness value chain analysis and development. After completion of this course, students will be able to:

- explain the concepts, principles and relevance of value chain approach
- explain the principles and conditions for upgrading existing value chain;
- understand the steps, linkages and issues in value chain analysis;

- describe the steps, challenges, prospects, interventions/initiatives/strategies for value chain development;
- analyze enabling environment for agribusiness value chain development using appropriate case studies; and
- analyze agribusiness ethics and value chain governance.

Course Content

Concepts, principles and relevance of value chain approach. Principles and conditions for upgrading existing value chain. Steps, linkages and issues in value chain analysis. Steps, challenges, prospects, interventions/initiatives/strategies for value chain development. Enabling environment for agribusiness value chain development and case studies. Ethics and value chain governance.

Mode of Course Delivery

This course will be delivered through lectures, assignments, brainstorming sessions, discussions and group work, presentations, case studies, scenarios, and audio-visuals to support practical learning.

Assessment Method

Continuous Assessment (assignment-scenario analysis, tests, presentations will account for 30% of the evaluation, and the remaining is final exam.

ABM 813 Food Processing Technology 2 Units

Course Description

The course will equip students the knowledge and skills needed to process, preserve, and package foods. It discusses how to process foods, conduct sensory evaluations of different food products, techniques for preserving and packaging foods.

Course Objectives

This is aimed at exposing students to approaches for food processing. At the end of this course, students will be able to:

- explain the concept of raw material processing and food preservation;
- carry out sensory evaluation of new food products;
- describe and apply quality and safety practices in food handling; and
- describe appropriate packaging techniques for different food items.

Course Content

Raw material processing and food preservation: Introduction to science of raw materials; post harvesting physiology; processing of plants and animal-based foods; food preservation techniques. Product development and sensory evaluation: introduction to food product development; types of new food products; stages in new foods product development; sensory evaluation of food products. Food quality and safety; biochemical and nutritional constituents of foods; food microbiology; food toxicology; food additives; functional foods; food quality

management. Food packaging: introduction of food packaging; types and functions of packaging materials; packaging requirements for different foods (environment, spoilage….)

Mode of Course Delivery

This course will be delivered through lectures, practical, assignments, brainstorming sessions, discussions and group work, presentations, case studies, excursions agribusiness enterprises, visits to selected public and private sector offices.

Assessment Method

Continuous Assessment (assignment, tests, presentations etc) will account for 30% of the evaluation, and the remaining is final exam.

ABM 807 Principles of Agripreneurship and Product Development 2 Units

Course Description

This course provides an in-depth understanding of the processes and tools involved in new product development. The course will cover key concepts such as idea generation, concept testing, project planning, and forecasting. This course will also focus on the key concepts of agripreneurship and strategic thinking, exploring the role of agripreneurial behavior and mindset in driving success in agribusinesses. The course will also cover how to generate new business ideas, process of setting up an enterprise, and agripreneurship management. Students will learn about the challenges faced in launching new products and services, and how to effectively overcome them. Students will also learn about the legal aspects of entrepreneurship, developing business plans, and how to apply entrepreneurial and strategic management practices in different organizational settings.

Course Objectives

The objective of this course is to equip students with the knowledge and skills needed to successfully develop and launch new products and services. At the end of the course, students will be able to:

- identify basic qualities of an agripreneur;
- identify and generate business ideas/generation (innovations, emerging enterprises, strategies and approaches of business);
- understand the process of setting up an enterprise (legal, resource requirement e,g personnel, finances, physical etc);
- explain enterprise management (resource mobilization);
- evaluate organizational behaviour-HRM, change management, partner management;
- analyze consumer behavior;
- understand business law-laws and regulations in agri-enterprise;
- develop business plan/business canvas model; and
- carry out business analysis.

Course Content

Introduction to agripreneurship: definition and importance of entrepreneurship; types of entrepreneurship (intrepreneurship, entrepreneurship); forms of agri-enterprises for running agribusiness organizations (small, medium, large); qualities/skills needed for running the

business. How to identify and generate business ideas: sources of new ideas (research, emerging enterprises; ideation process (brainstorming, random association, etc); enterprise selection. Process of setting up an enterprise: legal requirements; financial and economic requirements; personnel requirements; infrastructural requirements; business location. Enterprise Management: financial management; man-power/Personnel- HRM, change management, partner management; machinery/production; materials; resource mobilization in an enterprise. Product development: impetus to product innovation; new product development process. Marketing and consumer behavior: marketing functions; marketing institutions; market research (types of market information); marketing mix; marketing strategies; market segmentation; consumer needs; types of consumers; exogenous and endogenous influences on the buyer behavior; consumer purchasing process. Business law: laws and regulations governing agri-enterprise. Business Plan/Business Canvass model (proposal).

Mode of Course Delivery

The course will be delivered through a combination of lectures, discussions, case studies, and group projects. Guest speakers from industry may be invited to share their experiences and insights on new product development. Students also can work on real-world new product development challenges.

Assessment Method

Students will be assessed through a variety of methods including exams, quizzes, group projects, and presentations. The final assessment may include a comprehensive project where students will have to develop a new product or service concept and present their findings to a panel of experts. Participation in class discussions and activities will also be considered as part of the continuous assessment. Continuous assessment will account for 30% of the evaluation, and the remaining is final exam.

ABM 802 Research Methods in Agribusiness and Value Chain Management 3 Units

Course Description

The course provides students with advanced research techniques in agribusiness management. It employs both quantitative and qualitative research techniques in agribusiness and value chain development. The course will cover areas of research process and methods; research design; sample and sampling; writing good literature reviews; data; data processing and quality control; data analysis; research proposal and research report writing; research paper writing; referencing.

Course Objectives

This course is aimed at improving the knowledge and capacity of students to conduct agribusiness and food value chain management research to generate information that will contribute to solving the problems facing the sector. At the end of this course, learners will be able to:

- understand the kernel of research problem in agribusiness and food value chain management studies;
- write good literature reviews;

- conduct agribusiness and food value chain management researches;
- apply the knowledge and skills gained in collecting and analyzing data generated from both qualitative and quantitative approaches;
- write sound research proposals and research reports;
- present and communicate research findings in appropriate forms;
- use different referencing styles to compile literature cited; and
- write high-quality journal articles.

Course Content

Overview of the research process and methods; agribusiness research design – qualitative and quantitative research designs; sample and sampling; writing good literature reviews; data collection using different techniques and tools/instruments; data processing and quality control; data analysis – qualitative and quantitative analysis; research proposal and research report writing in agribusiness and food value chain management; research paper writing in agribusiness and food value chain management; referencing.

Mode of Course Delivery

The mode of delivery for this course will mainly depend on lectures, presentations, discussions and group work on writing research proposals, and implementing data collection and analysis using qualitative and quantitative approaches.

Assessment Method

Continuous assessment (assignment, tests, presentations etc) will account for 30% of the evaluation, and the remaining is final exam.

ABM 804 Agribusiness and Value Chain Incubation 3 Units

Course Description

This course is designed to provide students with hands-on experience in the agribusiness industry through incubation programs. Students will have the opportunity to work with established agribusinesses, startups, and relevant industry partners to gain practical skills and knowledge in the field of agribusiness and food value chain. Throughout the attachment, students will be encouraged to reflect on their experiences and apply their learning to real-world situations.

Course Objectives

- to provide students with real-world experience in the agribusiness industry through industry attachments;
- to equip students with the skills and knowledge needed to succeed in the agribusiness sector;
- to foster innovation and entrepreneurship in agribusiness through incubation programs; and
- to build connections and networks within the agribusiness industry.

Assessment Method
Students will prepare and present report of the experience gained from industry attachments and incubation programs. This takes 100% of the assessment.

ABM 806 Seminar in Agribusiness and Value Chain Management 2 Units

Course Description
The course will cover special topics related to emerging issues in agribusiness and value chain management in Nigeria and globally.

Course Objectives
The main objective of this course is to expose and test the ability of students to write and make seminar presentations on current agribusiness and value chain management issues. At the end of this course, students will be able to:

- conduct good literature reviews in trends and advances in agribusiness and value chain management using different techniques;
- write and present good-quality research papers using appropriate delivery methods;
- develop and present seminars on current issues in agribusiness and value chain management.

Assessment Method
Preparation and presentation of seminar paper on current issues of agribusiness and value chain to students and lecturers. This takes 100% of the assessment.

ABM 812 Crop, Livestock and Fish Value Chain Management 2 Units

Course Description
This course is designed to address the general principles of crops, livestock and fisheries production and their supply chains; different processing methods of agricultural products; estimating of post-harvest losses in crop products; identify post-harvest and processing facilities for crops, livestock and fisheries products; estimate the viability of different agricultural products processing techniques; monitoring and evaluation of safety and quality assurance measures in harvesting, transporting, processing, storage, grading, packaging, standardization and marketing of agricultural products in Nigeria and abroad; understand agrologistics requirements of crops, livestock, and fisheries products; and analyze the enabling environment for crop, livestock and fish value chains management.

Course Objectives
The broad objective of this course is to expose students to knowledge and skills of managing agribusinesses such as crop, livestock, and fish value chains. At the end of this course, students will be able to:

- explain the principles of crops, livestock and fisheries production and their supply chains;
- explain the different processing methods of agricultural products;

- apply the principles of processing to add value to agricultural products;
- describe the different post-harvest changes taking place in crop products, estimate the losses and suggest ways of minimizing the losses;
- analyze losses in livestock and fisheries products as a result of poor processing;
- identify and manage viable post-harvest and processing facilities for crops, livestock and fisheries products;
- assess the economic, social, and environmental viabilities of different agricultural products processing techniques;
- monitor and evaluate safety and quality assurance measures in harvesting, transporting, processing, storage, grading, packaging, standardization and marketing of agricultural products in Nigeria and export to other countries;
- understand the agrologistics requirements of crops, livestock, and fisheries products;
- analyze the political, environmental, social, technological, legal, and economic (PESTLE) environments affecting crop, livestock and fisheries value chain management.

Course Content

Principles of crops, livestock and fisheries production and their supply chains. Processing methods of agricultural products. Post-harvest changes taking place in crop products. Estimating the post-harvest losses in crop products. Types of losses in livestock and fisheries products resulting from poor processing and preservations. Post-harvest and processing facilities for crops, livestock and fisheries products. Estimating the viability of different agricultural products processing techniques. Monitoring and evaluation of safety and quality assurance measures in harvesting, transporting, processing, storage, grading, packaging, standardization and marketing of agricultural products in Nigeria and abroad. Agrologistics requirements of crops, livestock, and fisheries products. Political, Environmental, Social, Technological, Legal, and Economic (PESTLE) analysis crop, livestock and fisheries value chain management.

Method of Delivery

Lectures, group discussions and presentations, field and company visits.

Assessment Method

Continuous assessment (assignment, tests, presentations etc) will account for 30% of the evaluation, and the remaining is final exam.

ABM 814 Sustainability for Commodity and Food Value Chains 2 Units

Course Description

This course will provide students with the necessary knowledge and skills to critically appraise and evaluate sustainable commodity and food value chains, particularly focusing on agribusiness and food value chain projects. Students will be introduced to the concept of sustainability, tools of cost-benefit analysis of sustainable practices, ethical considerations in food value chain management, and food waste reduction and resource management.

Course Objectives

The primary objective of this course is to equip students with the theoretical and practical understanding of sustainability of food value chains. At the end of the course, students should be able to:

- understand the essence of sustainability in food systems and agribusinesses;
- apply the concept of sustainability in managing food value chains;
- effectively reduce food waste and efficiently manage resources in food value chains;
- understand and apply ethical and social considerations in food production and value chain management;
- conduct cost-benefit analysis of sustainable practices in agribusiness and food value chain projects; and
- use case studies and best practices to describe sustainability of commodity and food value chains in Nigeria and elsewhere.

Course Content

Introduction to Sustainability and Food Systems: definition of sustainability; overview of the food value chain; importance of sustainable food production. Sustainable energy and food value chain: energy consumption in agriculture; greenhouse gas emissions from food systems; production (solar, wind, and biomass energy in agriculture); energy-efficiency (production, processing and transportation). Sustainable Practices in food value chain: groecology; organic farming techniques; water usage and pollution in food production; precision agriculture; smart farming technologies; cold chain management and food preservation; sustainable packaging and distribution systems. Food Waste Reduction and Resource Management: causes and consequences of food waste; strategies for reducing food loss and waste; resource recovery and circular economy approaches. Ethical and Social Considerations in Food Production: fair trade and ethical sourcing; labour rights and social justice in agriculture; environmental standards; cost-benefit analysis of sustainable practices; market incentives for sustainability. Case Studies and Best Practices. Project Work and Presentations

Mode of Course Delivery

This course will be delivered through a combination of lectures, case studies, group discussions, and practical exercises.

Assessment Method

Continuous assessment (assignment, tests, presentations etc) will account for 30% of the evaluation, and the remaining is final exam.

ABM 808 Digital technology for Agri-food System 2 Units

Course Description

To equip students with cutting-edge knowledge and practical skills in applying digital technologies in the agri-food sector, fostering innovation, sustainability, and efficiency in agricultural practices and food systems across Africa. Graduates will be prepared to drive

digital transformation in agriculture, enhance food security, and contribute to economic development while addressing the challenges posed by climate change.

Course Objectives

The primary objective of this course is to equip students with cutting-edge knowledge and practical skills in applying digital technologies in the agri-food sector. By the end of the course, students should be able to:

- understand the role and impact of digital technologies within the agri-food value chain;
- apply data science, remote sensing, and GIS technologies for improving precision agriculture;
- acquire the skills to design, deploy, and manage Internet of Things (IoT) and sensor networks for monitoring soil, climate, and crop conditions, facilitating data-driven decision-making in farming;
- explore the principles of precision agriculture and smart farming technologies, emphasizing digital tools through relevant case studies;
- understand the application and potential of robotics and automation in agriculture, including drones and autonomous vehicles;
- learn the fundamentals of blockchain technology and its applications in enhancing food safety and traceability within the agri-food chain;
- develop strategies for leveraging digital platforms to enhance agricultural extension services and improve digital literacy among farmers;
- analyze the role of digital marketplaces and financial services in agriculture; and
- understand the agri-tech ecosystem, including the development and scaling of innovative solutions, and the policy and regulatory environment supporting agri-tech entrepreneurship.

Course Content

Introduction to Digital Technologies in Agri-food Value Chain Systems: overview of digital technologies in agriculture; digital transformation in agri-food systems: global vs Nigerian context; challenges and opportunities in African agriculture. Data Science and Analytics for Agri-food Value Chain Systems: principles of data science in agri-food value chain systems; remote sensing and GIS for precision agriculture; big data analytics and its application in crop forecasting and pest management. Internet of Things (IoT) and Sensor Technologies in Agri-food Value Chain Systems; introduction to IoT and sensors in farming; design and deployment of sensor networks for soil, climate, and crop monitoring; data management and analysis for informed decision-making. Smart Farming and Precision Agriculture: principles of precision agriculture; digital tools and technologies for site-specific crop management**.** Case studies: Success stories of precision farming in Nigeria. Agricultural Robotics and Automation: overview of robotics in agriculture; drones in crop monitoring and spraying; autonomous tractors and robotic harvesters: Prospects for Nigeria. Blockchain for Traceability in the Agri-Food Chain: introduction to blockchain technology; applications of blockchain for food safety and traceability; case studies on blockchain adoption in Nigerian

agri-food systems. Digital Extension Services and Farmer Digital Literacy: digital platforms for agricultural extension services; strategies for enhancing digital literacy among farmers; role of mobile technologies in reaching remote farmers**.** Digital Platforms for Market Access and Agri-Finance: digital marketplaces for enhancing access to markets for smallholder farmers; opportunities and challenges of digital financial services (DFS) in agriculture: the role of mobile technology in providing agricultural advisory services. Innovation and Entrepreneurship in Agri-Tech: ecosystem for agri-tech startups in Nigeria; funding and scaling agri-tech solutions; policy and regulatory environment for agri-tech innovation. Final Project: A capstone project where students will develop a prototype or detailed plan for a digital technology solution addressing a specific challenge in the Nigerian agri-food sector. This will involve problem identification, technology selection, system design, and an implementation plan, culminating in a presentation to an expert panel.

Mode of Course Delivery

This course combines lectures, hands-on workshops, case studies, field visits, and guest lectures from industry experts. Emphasis will be placed on collaborative learning, with students encouraged to work in teams for projects and assignments. The use of online learning platforms will also be integrated to provide access to resources and facilitate discussions beyond the classroom.

Assessment Method

Continuous assessment (assignment, tests, presentations etc) will account for 30% of the evaluation, and the remaining is final exam.

ABM 821 Financial Management, Strategy and Institutions 2 Units

Course Description

This course will provide students with the necessary knowledge and skills to critically appraise and evaluate financial management institutions and their strategies.

Course Objectives

The intent of this course is to expose the students to financial management issues, budgeting, strategies and institutions.

Course Content

Asset pricing and management, financial and capital structure theories, cost of capital, dividend policy, capital budgeting, mergers and acquisition, financial planning and strategy, sources of finance, leasing venture capital, working capital management and financial performance measurement. The course covers: overview of the financial system, embracing banks, non-bank financial institutions, money and capital markets and the regulatory authorities – the Central Bank, The Securities and Exchange Commission, the Stock Exchange, survey of the structure and operation of the market for short, medium and long term securities as well as the nature, objectives, structure, functions and practices of institutions such as the stock exchange, investment banking, insurance and pension institutions as well as international finance institutions. The other aspects include: economics

and legal aspects of the capital market, analysis of interest rates, cost of capital, prices of securities operations and their implications for investment and performance of the financial operators.

Mode of Course Delivery
This course will be delivered through a combination of lectures, case studies, group discussions, and practical exercises.

Assessment Method
Continuous assessment (assignment, tests, presentations etc) will account for 30% of the evaluation, and the remaining is final exam.

ABM 844 Agribusiness Policy and e-Business 2 Units
Course Description
This course will provide students with an in-depth understanding of agribusiness policy within the context of global economic policy, with a specific focus on the Nigerian agribusiness sector. Additionally, the course will cover e-business principles and strategies to equip students with the necessary knowledge and skills to succeed in the digital economy.

Course Objectives
The primary objective of this course is to equip students with in-depth knowledge of agribusiness policy within the context of Nigeria and global economic policy. By the end of the course, students should be able to:

- analyze and evaluate key agribusiness policy issues in Nigeria and globally;
- understand the impact of global economic policies on the agribusiness sector;
- explore e-business strategies and principles for agribusiness success;
- develop critical thinking and problem-solving skills in relation to agribusiness and e-business.

Course Content
Introduction to agribusiness policy and its importance; global economic policy and its impact on agribusiness; Nigerian agribusiness policy landscape; the African Continental Free Trade Agreement (AfCFTA) and its implications for agribusiness and value chain management; agribusiness development strategies; introduction to e-business and its relevance in agribusiness and value chain management; e-business management strategies for agribusiness and value chain management; distribution channels in e-business; privacy and security issues in e-business; cyber-laws and regulations in e-business

Mode of Course Delivery
The course will be delivered through a combination of lectures, case studies, group discussions, and hands-on practical exercises. Online resources and platforms will also be utilized for better engagement and interaction.

Assessment Method

Continuous assessment (assignment, tests, presentations etc) will account for 30% of the evaluation, and the remaining is final exam.

ABM 880 Master's Dissertation 6 Units

This is the dissertation, which will be used to assess the ability of the students to conduct good-quality researches/studies in agribusiness and food value chain management. Master's dissertations will be supervised by senior academics. The supervisor will be assigned by the Postgraduate School with the assistance of the Department. A template for writing dissertation will be developed and used by students.