**UNIVERSITY OF NIGERIA, NSUKKA**

**FACULTY OF VOCATIONAL AND TECHNICAL EDUCATION**

**DEPARTMENT OF VOCATIONAL AND**

**ENTREPRENEURSHIP EDUCATION**

**PDGTE, M.TECH AND Ph.D PROGRAMMES**

**2016**

**DEPARTMENT OF VOCATIONAL TEACHER EDUCATION**

**UNIVERSITY OF NIGERIA, NSUKKA**

**POSTGRADUATE DIPLOMA IN TECHNICAL EDUCATION**

**Philosophy of the Programme**

Postgraduate Diploma in Technical Education is made available to youth and adults who are already at work but are motivated to update or upgrade their present occupational skills or learn new skills and extended knowledge. Based on the strength of this philosophy, most of the people who will be admitted into the programme are already employed in teaching and technical education administration. Therefore, the Postgraduate Diploma in Technical Education will make them more effective in their respective employments.

**Objectives of the Programme**

The objectives of the programme are as follows:

1. To provide persons in teaching and administrative positions in technical and vocational institutions who do not possess any formal professional qualifications in technical education with the required body of knowledge and instructions.
2. To provide foundations for higher degrees for graduates in related fields lacking professional qualifications in technical and vocational education but desire advancement in technical and vocational education as a career.
3. To ensure effectiveness in institutions and administration in technical and vocational institutions by equipping the professionally unskilled persons with the theories, practices and philosophies of technology education.

**Scope**:

 The Postgraduate Diploma in Technical Education Programme is designed to cover foundational studies in vocational and technical basic courses in general education.

 The specific areas of technical education (with various options) covered by the programme are as follows:

Agricultural Education

Business Education

Computer Education

Home Economics and Hospitality Education

Industrial Technical Education

**Entry Requirements:**

**Agricultural Education**

Bachelor’s degree or HND in any area of agriculture passed at distinction or upper credit level.

**Business Education**

Bachelor’s degree or HND in Accountancy, Business Administration, Marketing and Secretarial Studies passed at distinction or upper credit level.

**Computer Education**

A minimum of Bachelors degree or HND passed at distinction or upper credit in Computer Science; Information and System Management; Combined Computer/Statistics; Computer Engineering. Other professionals in management and administration whose detailed academic records are acceptable to senate of the University of Nigeria may be admitted.

**Home Economics and Hospitality Management Education**

Bachelors degree or HND in Home Economics, Hotel Management Food Science, Catering, home and Rural Economics Home Science and Nutrition, Nutrition and Dietetics Textiles and Clothing, Fashion and Design, Food Service Management, passed at distinction or upper credit level.

**Industrial Technical Education**

Bachelor’s degree or HND in Mechanical Engineering, Civil Engineering, Building Technology, Electrical Engineering, Electronic Engineering Architecture, Auto Mechanics, Metal Technology, and Wood Technology, Plastic Technology passed at distinction or upper credit level.

**Employment Opportunities**

Most of the people who will be attending the courses are already employed in teaching and vocational/technical education administration. The Postgraduate Diploma in Technical Education will make them more effective in their respective employments.

**Mode of Study**:

The mode of study is by course-work and project.

**Duration of Study**:

The duration of the programme is one full academic session of two semesters in full-time study.

**Areas of Specialization**

 The Faculty of Vocational and Technical Education offers PGDTE Programmes in various areas of specialization as specified below:

Agricultural Education

Business Education

Computer Education

Home Economic and Hospitality Management Education

Industrial Technical Education

**Stress Codes**

1. Vocational and Technical Education and Core courses 0

2. Agricultural Education 1

3. Business Education 2 & 3 4 Computer Education 4

5. Home Economics Education (5 options) 5 & 6

6. Industrial Technical Education (3 options) 7 & 8

7. Project/Thesis 9

**POSTGRADUATE DIPLOMA IN TECHNICAL EDUCATION (PGDTE)**

**AGRICULTURAL EDUCATION**

**COURSES**

**First Semester**

**Course No. Course Title Units**

VTE 0501 Foundations of Technical Education 2

VTE 0503 Vocational Guidance 2

VTE 0505 Administration of Technical Education 2

VTE 0507 Measurement & Evaluation in Technical Education 2

VTE 0509 Statistics Technical Education 2

VTE 0511 Research Methods in Technical Education 2

EDU 0511 Educational Psychology I 2

EDU 0521 Curriculum Theory and Planning 3

 17

**Second Semester**

VTE 0502 Curriculum Development in Vocational Education 2

VTE 0510 Methodology in Agricultural Education 2

VTE 0512 Seminar in Agricultural Education 2

VTE 0514 Management of the School Farm for Profit 2

VTE 0504 Practical Teaching in Technology Education 3

EDU 0512 Educational Psychology II 2

VTE 0590 Project 4

  **17**

**BUSINESS EDUCATION**

**COURSES**

**First Semester**

**Course No. Course Title Units**

VTE 0501 Foundations of Technical Education 2

VTE 0503 Vocational Guidance 2

VTE 0505 Administration of Technical Education 2

VTE 0507 Measurement & Evaluation in Vocational Education 2

VTE 0511 Research Methods in Technical Education 2

VTE 0523 Office Technical 2

EDU 0511 Educational Psychology I 2

EDU 0521 Curriculum Theory and Planning 3

 **17**

**Second Semester**

VTE 0504 Practical Teaching in Technical Education 3

VTE 0520 Methodology in Business Education 2

VTE 0522 Seminar in Business Education 2

VTE 0524 Foundation of Business 2

VTE 0526 Principles Business & Marketing Education 2

EDU 0512 Educational Psychology II 2

VTE 0590 Project 4

 **17**

**COMPUTER EDUCATION**

**COURSES**

**First Semester**

**Course No. Course Title Units**

VTE 0501 Foundations of Technical Education 2

VTE 0503 Vocational Guidance 2

VTE 0505 Administration of Technical Education 2

VTE 0507 Measurement & Evaluation in Vocational Education 2

VTE 0509 Statistics Technical 2

VTE 0511 Research Methods in Technical Education 2

EDU 0511 Educational Psychology I 2

EDU 0521 Curriculum Theory and Planning 3

 17

**Second Semesterr**

VTE 0502 Curriculum Development in Technical Education 2

VTE 0504 Practical Teaching in Technical Education 3

VTE 0540 Methodology in Computer Education 2

VTE 0542 Seminar in Computer Education 2

EDU 0512 Educational Psychology II 2

Option 2

VTE 0590 Project 4

 **17**

**Option: Two units of course must be taken from the following:**

VTE 0544 Computer Hardware systems 2

VTE 0546 Computer Software systems 2

VTE 0548 Computer Programming 2

**HOME ECONOMICS AND HOSPITALITY MANAGEMENT EDUCATION**

**COURSES**

**First Semester**

**Course No. Course Title Units**

VTE 0501 Foundations of Technical Education 2

VTE 0503 Vocational Guidance 2

VTE 0505 Administration of Technical Education 2

VTE 0507 Measurement & Evaluation in Vocational Education 2

VTE 0509 Statistics in Technical 2

VTE 0511 Research Methods in Technical Education 2

EDU 0511 Educational Psychology I 2

EDU 0521 Curriculum Theory and Planning 3

 17

**Second Semester**

EDU 0512 Educational Psychology II 2

VTE 0502 Curriculum Development in Technical Education 2

VTE 0504 Practical Teaching in Technical Education 3

VTE 0550 Methodology in Home Economics & Hospitality Mgt. Edu. 2

VTE 0552 Seminar in Home Economics & Hospitality Mgt. Edu. 2

Option 2

VTE 0590 Project 4

 **17**

**Option: Two units of course must be taken from the following:**

VTE 0554 Home Administration Education 2

VTE 0556 Food and Nutrition Education 2

VTE 0558 Clothing Technical Education 2

VTE 0560 Textile Technical Education 2

**INDUSTRIAL TECHNICAL EDUCATION**

**First Semester**

**Course No. Course Title Units**

VTE 0501 Foundations of Technical Education 2

VTE 0503 Vocational Guidance 2

VTE 0505 Administration of Technical Education 2

VTE 0507 Measurement & Evaluation in Technology Education 2

VTE 0509 Statistics in Technical Education 2

VTE 0511 Research Methods in Technical Education 2

EDU 0511 Educational Psychology I 2

EDU 0521 Curriculum Theory and Planning 3

 17

**Second Semester (Industrial Technical)**

EDU 0512 Educational Psychology II 2

VTE 0502 Curriculum Development in Technical Education 2

VTE 0504 Practical Teaching in Technical Education 3

VTE 0570 Methodology in Industrial Technical Education 2

VTE 0572 Seminar in Industrial Technical Education 2

Option

VTE 0590 Project 4

  **17**

**Options: Two units of course must be taken from the following**

VTE 0574 Building Construction/Woodwork/Basic Technology 2

VTE 0576 Electricity/Electronics/Basic Technology 2

VTE 0578 Metalwork/Auto Mechanics/Basic Technology 2

**PGDTE COURSE DESCRIPTIONS**

**VTE 0501** **Foundations of Technical Education**

Philosophical, sociological, historical and economic foundations a comparative analysis. Content scope and objectives. Vocational education and national development. Professional opportunities in vocational education.

 (2 units)

**VTE 0502** **Curriculum Development in Technical Education**

Major components of curriculum in vocational education. Sources and factors in curriculum planning in vocational education. Historical trends in curriculum revision and innovation in technical education in Nigeria; steps in curriculum development. Curriculum evaluation – roles procedure, stages and evaluation of instruments in technology education. A review of syllabuses of secondary school vocational subjects related to course of study.

 (2 units)

**VTE 0503** **Vocational Guidance**

An introductory course in the principles and practices of vocational guidance. Emphasis is on problems in schools. Historical, philosophical, psychological and socio-economic foundations of the guidance movements and course in career education.

 (2 units)

**VTE 0504** **Practical Teaching in Technical Education**

Students are exposed to basic principles and procedures of practical teaching in vocational subjects including micro-teaching; participate in micro-teaching before the actual field practical teaching; actual field practical teaching of vocational subjects in post-primary institutions for a period of at least 6 weeks.

 (2 units)

**VTE 0505** **Administration of Technical Education**

Study of the philosophical, historical, social and psychological foundations underlying the organization, administration, supervision and teaching of vocational and practical arts education. Examination of existing patterns in Nigeria.

 (2 units)

**VTE 0507** **Measurement and Evaluation in Technical Education**

Theories and approaches to evaluation in technical education. Importance of objectives and types of objectives. Norm reference and criterion referenced effective domain and psychomotor domain. Essay tests, objective tests and performance tests, test validity and reliability, test administration and evaluation. Product and process evaluation in technology education skill evaluative skills in technology education.

 (2 units)

**VTE 0509** **Statistics in Technical Education**

Introductory statistical concepts, vocabulary and symbols. Principles and application of sampling and inference frequently used in reporting empirical research in general and vocational education.

 (2 units)

**VTE 0510** **Methodology in Agricultural Education**

Application of the principles of curriculum and course construction. Attention to specialized methods of teaching and measurement techniques appropriate to agricultural education. Planning of teaching laboratories and instructional materials.

 (2 units)

**VTE 0511** **Research Methods in Technical Education**

Techniques of empirical study including designing various types of study; methods of data collection; data analysis, simple ways of testing hypotheses and methods of writing research proposal and research reports.

(2 units)

**VTE 0512** **Seminar in Agricultural Education**

A consideration, identification and examination of some of the major issues presently facing Nigerian educational authorities regarding the role and nature of various technical vocational education and training under formal and non-formal settings. Instructional problems of teachers and students’ problems in choosing careers in vocational and occupations subjects will be considered.

 (2 units)

**VTE 0514** **Management of the School Farm for Profit**

Emphasis will be placed on the importance of the school farm; difference between a school farm and a commercial and/or traditional farm; agricultural activities on the social farm. The experience students and teachers could transfer from the school farm to improve agricultural outputs of the community will be discussed. Maintenance operation in the school farm will be of great focus.

 (2 units)

**V TE 0520** **Methodology in Business Education**

Application of principles of the curriculum and course construction. Attention is given to specialized methods of teaching and measurement techniques appropriate to business education. Planning of teaching laboratories and instructional materials in business education.

 (2 units)

**VTE 0522** **Seminar in Business Education**

A consideration, identification and examination of some of the major issues presently facing Nigerian educational authorities regarding the role and nature of various technical vocational education and training under formal and non-formal settings. Instructional problems of teachers and students’ problems in choosing careers in vocational and occupations subjects will be considered.

 (2 units)

**VTE 0523** **Office Technology**

Foundations of Office Technology Education. Introduction to contemporary Office Information Systems and Resources. E-office concepts and applications. Introduction to Office Systems and operations. E-commerce concept, Electronic Data Interchange. Virtual Office: implications for the Changing Office Environment and enabling technologies

 (2 units)

**VTE 0524 Elements of Business**

The scope of business. The character of business form – social, legal and economic perspectives. Social environment of business. Structure and functions of a business enterprise. Financial institutions, production, personnel and marketing in economic development. Government and Business. International business. Problems of the Nigerian business enterprises.

(2 Units)

**VTE 0526 Principles of Business and Marketing Education**

Philosophical, historical, sociological and economic foundations of business, office and distributive education. The scope and importance of business education with emphasis on distributive and office education. Current content and curriculum considerations. The role of research in distributive and office education.

 **VTE 0540** **Methodology in Computer Education**

Application of principles of the curriculum and course construction with application to classroom situations. Emphasis on methods of teaching (objectives, lesson planning, techniques of teaching and sources of materials), and measurement techniques appropriate to computer education. Planning of teaching laboratories and instructional techniques in computer education.

 (2 units)

**VTE 0542** **Seminar in Computer Education**

A consideration, identification and examination of some of the major issues presently facing Nigerian educational authorities regarding the role and nature of various technical vocational education and training under formal and non-formal settings. Instructional problems of teachers and students’ problems in choosing careers in vocational and occupations subjects will be considered.

 (2 units)

**VTE 0544** **Computer Hardware System**

Basic electricity, circuits, devices and accessories. Computer hardware components, connecting peripheral equipment. Configuring a basic workstation environment. Linking and connecting to networks. System cloning techniques. Understanding system specification formats.

 (2 units)

**VTE 0546 Computer Software Systems**

System and Application software. BIOS software configurations. The bootstrap loader. Operating systems. DOS, WINDOWS, UNIX, LINUX, MACINTOSH operating systems. System Utility program packages. Application software system and packages. Word processing, Spreadsheet, Database and Data Analysis packages.

 (2 units)

**VTE 0548 Computer Programming**

Features, and syntax of computer programming languages. Subroutines, basic data structures Q-Basic programming language.

(2 units)

**VTE 0550** **Methodology in Home Economics Education**

Application of the principles of curriculum and course construction. Students should be exposed to techniques in unit/lesson planning, implementation and evaluation in the different areas of home economics. Problems of classroom and laboratory management practices should be covered. Micro-teaching.

 (2 units)

**VTE 0552** **Seminar in Home Economics and Hospitality Management Education**

A consideration, identification and examination of some of the major issues presently facing Nigerian educational authorities regarding the role and nature of various technical vocational education and training under formal and non-formal settings. Instructional problems of teachers and students’ problems in choosing careers in vocational and occupations subjects will be considered.

 (2 units)

**VTE 0554** **Home Administration Education**

Meaning, scope and principles of home administration. Decision-making. Motivation for home administration. Planning, organizing, Implementing and Evaluation of both human and materials resources in the home to meet family needs. Management of time, energy, money and other resources. Work simplification. Economic security of the family. Communication patterns in the family. Management of family crises.

 (2 units)

**VTE 0556** **Food and Nutrition**

Management of food activities including the effective use of resources in food activities – time, energy, money, equipment etc. Food activity centres. Hygiene and safety principles and practices in meal activities. Meaning of nutrients, types, functions, sources, deficiency, digestion. Staying healthy good habits for physical, mental, emotional and social health. Guidelines for healthful eating. The food guide pyramid. Controlling calories.

 (2 units)

**VTE 0558** **Clothing Technology Education**

Course will cover principles of clothing construction. Clothing construction tools, equipment and techniques. Study of production systems in clothing industry – planning, controlling etc. Principles and practice of clothing technology management.

 (2 units)

**VTE 0560** **Textile Technology Education**

Course will cover advanced studies in fibre, yam and fabric construction. There will be exploration of drawings as they relate to textile design. Further studies on dyes, fabric finishes, batik, printing, etc.

 (2 units)

**VTE 0570** **Methodology in Industrial Technical Education**

Applications of the principles of curriculum and course construction. Attention to specialized methods of teaching and the measurement techniques appropriate to technical education. Planning of teaching laboratories and instructional materials.

 (2 units)

**VTE 0572** **Seminar in Industrial Technical Education**

A consideration, identification and examination of some of the major issues presently facing Nigerian educational authorities regarding the role and nature of various technical vocational education and training under formal and non-formal settings. Instructional problems of teachers and students’ problems in choosing careers in vocational and occupations subjects will be considered. (2 units)

**VTE 0574** **Building Constructions/Woodwork/Basic Technology**

Type of timber; sawing, conversion, seasoning, quality and defects of timber. Veneer and manufactured boards, woodwork joints. Woodworking machines, machine preparation of timber, hand tools – planes, saws drills and shapers. Woodwork project. Types of walls; manufacture of wall materials; doors, windows, lintels, column and beams; staircase and roofs; types and functions of roofs; parts of roofs; roofing materials; and roofing methods. Basic technology concepts, scope, principles and applications should be highlighted. Emerging technologies in various technological fields, challenges and adaptations should be treated.

 (2 units)

**VTE 0576** **Electricity/Electronics/Basic Technology**

Introduction to power systems and electric energy transmission. General structure of electrical power system relations in a transmission line. Regulation and losses standard and safety. Transformers and ac/dc machines. Principles of operation. Circuit models for transformers and DC machines. Transistor as an amplifier, biasing arrangements, classes of amplifier (A, B and C), push-pull and complementary circuits, amplifier coupling methods, operational amplification, impedance matching. Integrated circuits, field affect transistors, injunction transistors, measuring instruments – oscilloscope, ammeter, voltmeter, multi-meter and transistor tester. Basic technology concepts, scope, principles and applications should be highlighted. Emerging technologies in various technological fields, challenges and adaptations should be treated.

 (2 units)

**VTE 0578** **Metalwork/Auto-Mechanics/Basic Technology**

Electrical distribution system – generating stations, (hydro-electric, steam, nuclear and diesel), transmission lines, distribution system, circuit breakers, transformers and substations. The automobile engine – main components and their functions. Principles of operation of the two stroke and 8 cylinders, diesel and petrol engines. Crank arrangement and firing order. Verge operating mechanism. Fuel and exhaust system. Engine lubrication – reason for lubrication, types of lubricants and methods of lubrication. Basic technology concepts, scope, principles and applications should be highlighted. Emerging technologies in various technological fields, challenges and adaptations should be treated.

 (2 units)

**VTE 0590** **Project**

Independent investigation of topics pertinent to the development of practical aspects of technical vocational education and training in Nigeria. A report of the study is required.

 (6 units)

UNIVERSITY OF NIGERIA

FACULTY OF VOCATONAL AND TECHNICAL EDUCATION

DEPARTMENT OF VOCATIONAL AND ENTREPRENEURSHIP EDUCATION

M.TECH AND PH.D TECH. EDUCATION PROGRAMMES IN VOCATIONAL AND ENTREPRENEURSHIP EDUCATION

2016

**DEPARTMENT OF VOCATIONAL AND ENTREPRENEURSHIP EDUCATION**

**M.Tech/PhD DEGREE PROGRAMMES**

**Philosophy**

 The M.Tech. and PhD Programmes of the Department of Vocational and Entrepreneurship Education are intended to prepare professionally qualified individuals who can assume leadership positions in government, secondary schools, colleges of education, polytechnics, universities, industry and commerce. The Federal Government of Nigeria has, since the introduction of the National Policy on Education, placed emphasis on vocational and technical education. This emphasis has led to the establishment of College of Education (Technical) in various parts of the country and the introduction of programmes of technical and vocational education in several polytechnics and universities in Nigeria. All such programmes require well-trained lecturers with postgraduate qualifications in vocational and technical education.

**Objectives**

 The postgraduate programmes of the Department of Vocational and Entrepreneurship Education are intended to:

1. equip students with professional competencies that will enable them serve in leadership positions in secondary schools, government, colleges of education, polytechnics and universities;

2. increase the technical knowledge and skills of students so that they can keep abreast of technological development in their areas of specialization; and

3. develop research skills in students and teach them to apply such skills in the solution of problems in vocational and technical education.

**Scope:**

The M.Tech. and Ph.D Programmes of the Department of Vocational and Entrepreneurship Education are designed to offer courses in two different areas of Vocational Technical Education.

**ENTRY REQUIREMENTS**

1. **Master of Technology Education (M.Tech)**

 The following categories of candidates may be admitted on application

1. Graduates of the University of Nigeria, Nsukka or of other approved universities who have obtained at least a second-class honours degree or its equivalent in:

i. Vocational and Entrepreneurship Education;

ii. Agricultural Education

iii. Business Education

iv. Computer Education

v. Home Economics and Hospitality Management Education

vi. Industrial Technical Education

 Graduates of related disciplines such as Engineering, Home Economics, Textile Technology, Fashion Designing, Home and Rural Economics, Clothing Technology, Business Administration, Plastic Technology, Computer Sciences and different areas of Agriculture, who have obtained a second class honour degree or its equivalent, and who have in addition a Post-Graduate Diploma in Technical Education (PGDTE), passed at credit level and above.

1. Holders of the Higher National Diploma who have in addition obtained a Post- Graduate Diploma in Technical Education at credit level or above.
2. Other Graduates of the University of Nigeria, or of other recognized universities whose detailed academic records are considered satisfactory by the Senate of the University of Nigeria.

2. **Doctor of Philosophy (Ph.D)**

Candidates who possess a Masters or Higher degree in any area of Vocational and Technical Education from the University of Nigeria or other approved universities may be admitted into the Doctor of Philosophy Programme provided that they obtained a minimum GPA of 3.50 on a 5-point scale or 3.00 on a 4-point scale and that a satisfactory research work formed part of the Master’s degree.

Candidates who hold other qualifications may be admitted into the Doctor of Philosophy programme if their detailed academic records are satisfactory to the Senate of the University.

**MODE OF STUDY**

1. The Master of Technology Education degree will be prosecuted through course work and project, where course work predominates over research and constitutes not less than two-thirds of the total credit load.

2. **Doctor of Philosophy:** The Doctor of Philosophy degree will be prosecuted through course work and doctoral research thesis.

**DURATION OF PROGRAMME AND RESIDENTIAL REQUIREMENTS**

The maximum and minimum duration of Postgraduate Programme shall be:

(a) **Master’s Programme**

 **Full-time:** The minimum duration = Four Semesters

 The maximum duration = Six Semesters

 **Part-time:** The minimum duration = Six Semesters

 The maximum duration = Eight Semesters

(b) **Ph.D Programme**

 **Full-time:** The minimum duration = Six Semesters

 The maximum duration = Ten Semesters

 **Part-time:** The minimum duration = Eight Semesters

 The maximum duration = Twelve Semester

**EMPLOYMENT OPPORTUNITIES**

 Students who successfully complete the postgraduate degree programmes of the Department of Vocational and Entrepreneurship Education may be employed in the following positions:

(a) Secondary school principals, vice-principals and teachers of technical and vocational subjects.

(b) Administrators and managers of training programmes in industries.

(c) Lecturers in N.C.E programmes in Vocational and Technical Education in Colleges of Education and Polytechnics.

(d) Lecturers in degree programmes in Vocational and Technical Education Programmes in Universities.

**AREAS OF SPECIALIZATION**

 The Department of Vocational and Entrepreneurship Education offers M.Tech. Programmes in various areas of specialization as specified below. Students may specialize in any of these areas at both Masters and PhD levels:

Vocational Education

 Entrepreneurship Education

**Stress Areas Stress Codes**

1. Vocational and Technical Education 0

2. Vocational and Entrepreneurship Education 1

3. Vocational Education 2

4. Entrepreneurship Education 3

5. Dissertation/Thesis 9

**DEPARTMENT OF VOCATIONAL AND ENTREPRENEURSHIP EDUCATION**

**VOCATIONAL AND ENTREPRENEURSHIP EDUCATION**

**COURSES**

**M.Tech. PROGRAMME**

**First Semester**

**Course No Course Title Units**

VTE 501 Theories and Administration of Voc. & Technical Edu. 3

VTE 503 Research Methods in Voc. & Technical Edu. 3

VTE 505 Curriculum Development in Voc. & Technical Edu. 3

VTE 507 ICT in Voc. & Technical Edu. 3

VEE 511 Occupational Guidance 3

PGC 601 Research Methodology and Application of ICT in Research 3

 **18**

**Second Semester**

Options

6 Units of Courses must be chosen from options A or B

**A.** **VOCATIONAL EDUCATION**

VEE 520 Evaluation in Vocational & Technical Edu. 2

VEE 522 Fundamentals of Vocational Enterprise Development 2

VEE 524 Facilities Planning and Wastage Management in Vocational Edu. 2  **6**

**B. ENTREPRENEURSHIP EDUCATION**

VEE 530 Foundations of Entrepreneurship Education 2

VEE 532 Entrepreneurship Resource Mobilization 2

VEE 534 Business Creation and Ventures 2

 **6**

**Third Semester**

VEE 513 Seminar in Vocational and Entrepreneurship Education 3

VEE 590 Thesis/Dissertation 6

 **9**

**Grand Total of Course Units = 33**

**Ph.D PROGRAMME**

**First Semester**

**Course No. Course Title**

VTE 601 Emerging Issues and Innovation in Vocational and Technical Edu. 3

VTE 603 Enterprise Development in Vocational and Technical Education 3

VTE 605 Proposal and Grant Writing in Vocational and Technical Edu. 3

PGC 701 Synopsis and Grant Writing 3 **12**

**Second Semester**

VEE 610 Doctoral Seminar in Vocational and Entrepreneurship Education 3

VEE 612 Advanced Curriculum Studies in Vocational and Entrepreneurship

Education 3

VEE 614 Emerging Issues and Innovations in Vocational and

Entrepreneurship Education 3

 **9**

**3rd Semester**

Six Units of courses must be chosen from any of the options A or B

**A.** **VOCATIONAL EDUCATION**

VEE 621 Human Resource Management in Vocational Education 3

VEE 623 Analysis of Apprenticeship systems and Skills Dev. 3

 **6**

**B. ENTREPRENEURSHIP EDUCATION**

VEE 631 Entrepreneurship Operations and Management 3

VEE 633 Enterprise Growth and Social Responsibilities 3

 **6**

**4th Semester**

 **A.** **VOCATIONAL EDUCATION**

VEE 620 Career Development in Vocational Education 3

VEE 622 Public Speaking and Advocacy in Vocational Education 3

 **6**

**B. ENTREPRENEURSHIP EDUCATION**

VEE 630 Enterprise Project Management 3

VEE 632 Financing New Ventures 3

 **6**

**5th and 6th Semesters**

VTE 690 Dissertation/ Thesis 12

**Grant total 45**

**COURSE DESCRIPTIONS**

**M.TECH. PROGRAMMES**

**VTE 501 Theories and Administration of Vocational & Technical Education**

Vocational and Technical Education theories, and processes that have shaped vocational/technology education. Evaluation of the basic theoretical concepts, self-concept, personality concepts, environmental and self-realization concepts relating to Vocational/technical Education. The concept of policy, institutions in educational policy formulation; policy analysis tools; issues in Nigerian Educational Policy and Vocational/Technical Education. Principles and approaches in Vocational/Technical education administration and supervision. Administration and supervision of secondary and tertiary vocational education institutions.

 (4 units)

**VTE 503 Research Methods in Vocational &Technical Education**

Methodologies and procedures in Vocational and Technical Education research; problems formulation - use of problem tree and solution tree analysis; research objectives, questions and hypothesis; research designs, methods of data collection, development of instrument for data collection, thesis proposal and reporting. Statistical techniques applicable to research in Vocational/Technical Education; Descriptive techniques and inferential statistics such as t-test, analysis of variance (ANOVA), analysis of covariance (ANCOVA), regression analysis etc. Non-parametric statistical techniques.

 (3 units)

**VTE 505 Curriculum Development in Vocational & Technical Education**

Selection and organization of instructional materials for technical education courses, study of current curriculum practices, concepts and trend in the field of technology education. Curriculum designs in different occupational fields of technology education. Principles underlying curriculum research, development, and improvement. (2 units)

**VTE 507 ICT in Vocational and Technical Education**

Computer Literacy. Principles and general application of Information Communication Technology in Vocational and Technical Education Programmes. ICT as curriculum content, instructional delivery tools, evaluation/assessment tools etc.. Internet Services and use of e-learning concepts. Instructional methods and materials for ICT application.

 (3 units)

**VEE 511 Occupational Guidance**

Techniques, procedures and instrument for providing occupational guidance for school leavers. Review of occupational areas, placement follow-up activities, classification and description of jobs and industries and current issues, problems and trends in education, society and the world of work.

 (2 units)

**PGC 601 Research Methodology and Application of ICT in Research**

 **(Masters Degree Course)**

In-dept research work aimed at acquiring full knowledge and presentation in scholarly writing of the concepts, issues, trends in the definition and development of the study area from African and Western perspectives. Major steps in research: Selection of problem, Literature review, Design, Data collection, analysis and interpretation, conclusions. Study of various research designs, Historical, Case studies, surveys, descriptive, cross sectional experimental, etc. Analysis, surveys and synthesis of conceptual and philosophical foundations of different disciplines. Identification of research problems and development of research data and the format for presenting research results (from designing the table of contents to referencing, bibliography and appendix). Data analysis and result presentation in different disciplines using appropriate analytical tools. Methods of project/dissertation writing. Application of appropriate advanced ICT tools relevant in every discipline for data gathering, analysis and result presentation. Essentials of spreadsheets, Internet technology, and Internet search engines. All registered Masters Degree students must attend a solution based interactive workshop to be organised by the School of Postgraduate Studies for a practical demonstration and application of the knowledge acquired from the course, conducted by selected experts.

**VEE 520 Evaluation in Vocational and Technical Educational**

Theories and approaches to evaluation in Vocational and Technical Education. Current methodology in evaluation, such as criterion-referencing, cost benefit analysis, cost effectiveness, Programme Evaluation and Review Techniques (PERT)

 (2 units)

**VEE 522 Fundamentals of Vocational Enterprise Development**

Developing business centres, functions of business development centres. Vision, mission, scope, activity areas, partnerships and collaboration of BDCs.

(3 units)

**VEE 524 Facilities Planning and Wastage Management in Vocational &**

**Entrepreneurship Education**

Problems related to the planning, preparation and utilization of facilities in Vocational and Entrepreneurship Education. Identifying and specifying facilities, equipment and instructional materials needs. (3 units)

**VEE 530 Foundations of Entrepreneurship Education**

Understanding Entrepreneurship. Growth of a business idea. Concept and use of intellectual property. Family Business Entrepreneurial support. Introduction, registration and doing business in Nigeria.

 (2 units)

**VEE 532 Entrepreneurship Resource Mobilization**

Introducing and or buying a business in Nigeria. Entrepreneurial finances. Entrepreneurship business Planning, Entrepreneurship business models.

 (2 units)

**VEE 534 Business Creation and Ventures**

Creativity and the business idea, Legal issues in business creation and establishment. Organizational and venture plans. Marketing and financial plans.

 (2 units)

**VEE 513 Seminar in Vocational and Entrepreneurship Education**

Consideration of business education problems of greatest concern to the group and to the individual students by means of class discussion, presentation of position papers and research findings, groups discussions and individual conferences. (3 units)

**VTE 590 Research Project**

Supervised independent investigation of topics in the areas of Vocational Agriculture, Business, Computer, Home Economics and Industrial Technical Education. A project is required.

 (6 units)

**VTE 601 Emerging Issues and Innovation in Vocational and Technical**

**Education**

Identification of emerging issues and challenges that have implications for technical Education – National and Global; Greening TVET concept, green jobs and green skills in technology education. Climate change and environmental preservation- implications for technical education. Problem solving skills and innovations Today’s national and international emphasis on funding and financing of vocational education for increased productivity. Students are expected to deliver one seminar paper in this course.

 (3 units)

**VEE 603 Enterprise Developments in Vocational Technical Education**

Productivity theories and entrepreneurial developments with emphasis on the management of enterprises and the development and marketing of products. Application of vocational skills in enterprise development and production of consumer products. Feasibility study and development of business plans. Crafting vision and mission statements. Logical and legal frameworks for business enterprise. Management structures and operations in business management. Students and community engagements in business enterprises. Monitoring and evaluation of business enterprises. (2 units)

**VTE 605 Proposal and Grant Writing in Vocational and Technical Education**

Procedures in writing research proposals. Writing styles, chapter, citation, organization, referencing, etc. Concept and types of grants. Grant writing techniques grants in technology education. Sources of grants in TVET. Challenges and prospects in writing grant proposals. (3 units)

**PGC 701: Synopsis and Grant Writing**

Identification of types and nature of grant and grant writing; mining of grants application calls on the internet. Determining appropriate strategy for each grant application. Study of various grant application structures and contents and writing of concept notes, detailed project description, budgeting and budget defence. Study of sample grant writings in various forms and writing of mock research and other grants. Identification of University of Nigeria synopsis structure and requirements, (Introduction, Methodology and Results). Determining the contents of each sub-unit of the synopsis. Steps in writing synopsis from the Dissertation/Thesis document. Structural and language issues. Common errors in synopsis writing and strategies for avoiding them. The roles of the student and the supervisor in the production of a synopsis. Writing of mock synopsis. All registered Ph.D students must attend a solution-based interactive workshop to be organised by the School of Postgraduate Studies for a practical demonstration and application of the knowledge acquired from the course, conducted by selected experts.

**VEE 610 Doctoral Seminar in Vocational and Technical Education**

Analyses, discussions and presentation of pertinent issues in Technical teacher education with general emphases on vocational education and particular references to the various specializations in Agricultural Education; Business Education; Computer Education; Home Economics Education and Industrial Technical Education.

(4 units)

**VEE 612 Advanced Curriculum Studies in Vocational and Entrepreneurship**

**Education**

Identification and examination of curriculum problems and issues in various areas of Technology education. Application of various curriculum principles and framework. Development of curricular for various technology areas. Curriculum innovations and practical application in curriculum improvement. Candidates will be expected to deliver one seminar in this course. (3 units)

**VEE 614 Emerging Issues and Innovations in Vocational and**

**Entrepreneurship Education**

Focuses on trends and current issues in Technical Vocational Education and Training (TVET) Greening issues in TVET, Tuning and Harmonization of TVET financing TVET. Public, private Partnership in TVET Project management in TVET.

**VEE 620 Career Development in Vocational Education**

Planning cooperative education and internship programmes. Career planning guide, internship and full time positions. Career fairs , professional ethics. Writing resumes – functional, chronological, internship, electronic. Power verbs for resume writing. Letters and interviews – informational, behavioural. Frequently asked questions (FAQs) by employers and employees. Transferable skills. (6 units)

**VEE 621 Human Resource Management in Vocational Education**

Course will focus on identification of available human resources in vocational education; their utilization for efficient vocational programmes implementation and management. Organization of workshops, seminars, conferences on current human resource development issues in vocational education (3 units)

**VEE 622 Public Speaking and Advocacy in Vocational Education**

Speaking and listening techniques, speech preparation- organizing and outlining. Speech presentation, varieties of public speaking in vocational education. Advocacy models, techniques and media. Key vocational issues requiring advocacy and public speaking. (3 units)

**VEE 623 Analysis of Apprenticeship systems and Skills Devpt.**

 Apprenticeship concept, types/models in formal and informal TVET systems. Issues and challenges in apprenticeship systems and skills development. Designing apprenticeship programmes in different occupational areas. (3 units)

**VEE 630 Enterprise Project Management**

Business Analysis. Agile Contract Management. Principles of time management.

**VEE 631 Entrepreneurship Operations and Management**

Operations management. Human resources management, Electronic business Operations. Entrepreneurship networking Project Management.

**VEE 632 Financing New Ventures**

Debt and Equity Financing. Internal or External Funds. Personal Funds and Family and Friends. Bank loans and other public financings. Research and Development partnerships. Government Grants. Private Grants and Bootstrap Financing.

**VEE 633 Enterprise Growth Management**

Entrepreneurship Growth Management. Entrepreneurship Exit Management. Entrepreneurship business and social responsibility. Concept and practice of the social entrepreneur.

**VTE 690** **Thesis**

Supervised independent investigation in the areas of Vocational Education, Agriculture, Business Computer, Home Economics and Industrial Technical Education.

 (12 units)