



Tuning Africa Phase II

5th General Meeting

Brussels, 13 - 15 November 2017



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1. AGENDA

1.1. General Agenda

TUNING AFRICA PHASE II
Agenda for the Fifth General Meeting
13 to 15 November 2017
Brussels, Belgium

Accommodation

Thon Hotel Brussels City Centre
Avenue du Boulevard 17
Phone: +32 2 205 15 11
Brussels
Belgium

Sunday 12 November 2017: Arrival of Tuning Africa II participants

18.00 – 20.30	Registration
20.30	Dinner: Thon Hotel Brussels City Centre

Monday 13 November 2017

Albert Borschette Conference Centre (CCAB)
(European Commission)
36 Avenue Froissart
B-1040 Brussels
Belgium

Morning Session

PLENARY

8.00 – 9.00	Registration
9.00 – 9.30	Official Opening and welcome
9.30 – 10.00	Harmonization Strategies in African Higher Education: main policies from African Union and European Union perspectives. Tuning and its contribution to the process Beatrice Njenga, Head of Education Division, African Union Commission Deirdre Lennan, Directorate General for Education and Culture, European Union Commission,

This initiative is implemented on behalf of the European and African Union Commissions by:





Pablo Beneitone, Director Tuning Academy, University of Deusto

Chair: Charles Awono Onana, Director, Ecole Nationale Supérieure Polytechnique, Yaoundé I, Cameroon

10.00 – 10.30

Designing programmes following the Tuning methodology: some reflections from Subject Area Groups

Round Table:

- New programmes in Agricultural Sciences: Hortense Atta Epse Daillo
- Revised programmes in Applied Geology: Digne Edmond Rwabuhungu R.
- Joint programmes in Mechanical Engineering: Charles Awono Onana
- Relevance of the new/revised programmes for employability from the Higher Education Management perspective: Ronald Bisaso

Chair: Ahmed ElGohary, President, Egypt-Japan University for Science and Technology (E-JUST)

10.30 – 11.00

Coffee Break

11.00 – 11.30

A Implementation of Tuning at University level: some experiences from Subject Area Groups

Round Table:

- Staff development initiatives: identification of needs and strengths for the implementation of Tuning in Medicine, Segun Akyniyinka
- Impact of the *Course design for outcomes based learning in higher education* - Tuning Staff Development Course at institutional level from the Economics perspective, Charles Barnor
- Importance of *Assessment for learning* - Tuning Staff Development Course in Civil Engineering, Stanley Shitote
- Staff Development Workshops strategy: some experiences in Teacher Education, Honoratha Michael Kisenge Mushi, Open University of Tanzania

Chair: Hortense Atta Epse Daillo, University of Nangui Abrogoua

11.30 – 12.15

A Credit System from a global perspective

Round Table:

- Europe and ECTS credits: Robert Wagenaar, Director of Tuning Academy, University of Groningen, the Netherlands
- Latin American Credit: Leticia Suñe, Federal University of Bahia / Faculty of Technology and Sciences - FT, Brazil
- Russia and its credit system: Vera Ivanovna Zobotkina, Vice-Rector for International Cooperation, Russian State University for the Humanities, Russian Federation
- A Proposal to establish African Credit Transfer System: Damtew Teferra, Professor of Higher Education and leader of Higher Education Training and Development, University of Kwazulu-Natal, South Africa

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Chair: Yohannes Woldetensae, Senior Education Expert, African Union Commission

12.15 – 14.00

Lunch: CCAB Building canteen

Afternoon session

14.00 – 14.30

Tuning and HAQAA: bridging two initiatives
Julia González, Tuning Academy Senior Advisor
Elizabeth Coluci and Youhansen Eid, representatives of HAQAA project

Chair: Etienne Ehouan Ehile, Secretary General, Association of African Universities

14.30 – 15.00

Research actions in Tuning Africa and their links with the Tuning Journal for Higher Education
Lupo Dona dalle Rose, Editor of the Tuning Journal for Higher Education – University of Padova, Italy
Anna Serbati, Assistant Editor of the Tuning Journal for Higher Education - University of Padova, Italy
Ladislav Bizimana, Manager Editor of the Tuning Journal for Higher Education – University of Deusto, Spain
Mohammad Megahed, Emeritus Professor of Solid Mechanics, Cairo University, Egypt

Chair: Damtew Teferra, Professor of Higher Education and leader of Higher Education Training and Development, University of Kwazulu-Natal, South Africa

15.00 -15.30

The Student Voice in the African Harmonization Process in Higher Education.
Short presentations from students

Chair: Digne Edmond Rwabuhungu R., Student Voice Taskforce, Head, University of Rwanda.

15.30 – 16.00

Summary of Tuning Africa II main outcomes and their relevance for AU and EU aims
Beatrice Njenga, Head Education Division, African Union Commission
Deirdre Lennan, Directorate General for Education and Culture, EU Commission,
Pablo Beneitone, Director Tuning Academy, University of Deusto

16.00 – 16.15

Certificate Ceremony

16.15 – 16.30

Official Closing



1.2. Agenda for the 8 Subject Area Groups (Agricultural Sciences, Civil Engineering, Economics, Geology, Higher Education Management, Mechanical Engineering, Medicine and Teacher Education)

Tuesday 14 November 2017

Thon Hotel Brussels City Centre
Avenue du Boulevard 17
Brussels
Belgium

ALL PARTICIPANTS WILL TAKE PART IN PARALELL WORKSHOP SESSIONS

09.00 – 10.30

Workshop sessions on 6 different topics:

- **Enabling academics to facilitate student ownership of learning through innovative assessment practices**, Zubeida Desai, University of the Western Cape, South Africa (English)
- **Case-Based Lectures**, Badr Mesbah, Suez Canal University, Egypt, Medicine SAG, EN
- **Student Centered Learning: Introduction to the Team-based Learning approach**, Esther Sakyi-Dawson, University of Ghana, Ghana (English)
- **Promoting Constructive Alignment Between ILOs, Learning Activities, Teaching, and Assessment Methods**, Jorge Fringe, Universidade Eduardo Mondlane, Mozambique (English)
- **Rédaction des Résultats d'apprentissage visés et début de séquençage**, Seydou Tiho, Université Nangui Abrogoua, Ivory Coast (French)
- **Travail des Étudiants dans le Système de Crédit**, Jean Baptiste Ramaroson, Université d'Antananarivo, Madagascar (French)

10.30 – 11.00

Coffee Break

11.00 – 12.30

Continuation of Workshop sessions on 6 different topics

12.30 – 14.00

Lunch: Thon Hotel Brussels City Centre

WORKING IN SUBJECT AREA GROUPS

14.00 – 15.30

Finalizing outcomes of Tuning Africa II

Discussion and general agreements in relation to Subject Area Group final report:

- 1) Introduction
 - Presentation of the countries involved in the SAG
 - Presentation of the Members/Universities
- 2) Definition of generic competences- A thematic perspective

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- Brief analysis of the generic competences from subject area perspective.
- Highlight some particular aspects considered and/or not considered in the list of generic competences for Tuning Africa.
- 3) Identification of specific competences
 - Presentation of the subject specific competences agreed in the group.
 - Explanation of the process followed to achieve the list of subject specific competences.
 - Institutional/national/subregional/continental/international references that the SAG took into account to achieve the list of subject specific competences.
- 4) Consultation and reflections
 - Presentation of analysis of the results of generic competences survey (in relation to SAG perspective).
 - Presentation of analysis of the results of subject specific competences survey
 - Interpretation of the results.
- 5) Elaboration of Meta-Profiles
 - Description of the process followed by the SAG to agreed a meta-profile.
 - Presentation of the meta –profile as a graphic.
 - Explanation of the main components/elements of the Meta – profile and how it is linked to the previous steps (generic and subject specific competences agreed).
- 6) Contrast of Meta – profile at regional level
 - Reflection on the coincidences and differences between the meta-profile and real degree profiles at the Universities.
- 7) Some examples of revised/new programmes
 - Presentation of some examples of revised/new programmes elaborated. (NOT ALL programmes, only 2 or 3 as examples)
- 8) Reflection on staff development: needs and possibilities at SAG level
 - Description of the main strengths and needs in terms of staff development at SAG level. Some proposals to address these challenges.
- 9) Student Workload reflection
 - Relevance of a continental credit system. Issues affecting its adoption that are related to the SAG.
 - Main issues arising from the workload consultation for the SAG.
- 10) Conclusions
 - Final considerations and proposals for future activities.

Document: - Draft version of Subject Area Report

15.30 – 16.00

Coffee break

16.00 – 17.30

Continue with final agreements related to SAG report.

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Wednesday 15 November 2017

Thon Hotel Brussels City Centre
Avenue du Boulevard 17
Brussels
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WORKING IN SUBJECT AREA GROUPS

- 9.00 – 10.30** **Subject Area Group Final Report**
Strategies for dissemination of Tuning Africa II outcomes at continental, regional, national and institutional level.
Inventory of possible approaches.
Assignment of tasks for the coming weeks.
- 10.30 – 11.00** Coffee break
- 11.00 – 12.30** **A Credit System proposal for Africa.**
General reflection on the Document.
Suggestions and improvements.
Discussion of how to implement the proposal at institutional level.
Exchange of views and experiences.
Recommendation of strategies for implementation.
- Document:* - *A Credit System proposal for Africa*
- 12.30 – 14.00** Lunch: Thon Hotel Brussels City Centre

Departure



1.3. Agenda for the Tuning Africa Project Advisory Group (TAPAG)

Tuesday 14 November 2017

Thon Hotel Brussels City Centre
Avenue du Boulevard 17
Brussels
Belgium

ALL PARTICIPANTS WILL TAKE PART IN PARALELL WORKSHOP SESSIONS

09.00 – 10.30

Workshop sessions on 6 different topics:

- **Enabling academics to facilitate student ownership of learning through innovative assessment practices**, Zubeida Desai, University of the Western Cape, South Africa (English)
- **Case-Based Lectures**, Badr Mesbah, Suez Canal University, Egypt, Medicine SAG, EN
- **Student Centered Learning: Introduction to the Team-based Learning approach**, Esther Sakyi-Dawson, University of Ghana, Ghana (English)
- **Promoting Constructive Alignment Between ILOs, Learning Activities, Teaching, and Assessment Methods**, Jorge Fringe, Universidade Eduardo Mondlane, Mozambique (English)
- **Rédaction des Résultats d'apprentissage visés et début de séquençage**, Seydou Tiho, Université Nangui Abrogoua, Ivory Coast (French)
- **Travail des Étudiants dans le Système de Crédit**, Jean Baptiste Ramaroson, Université d'Antananarivo, Madagascar (French)

10.30 – 11.00

Coffee Break

11.00 – 12.30

Continuation of Workshop sessions on 6 different topics

12.30 – 14.00

Lunch: Thon Hotel Brussels City Centre

14.00 – 15.30

Linking Tuning Africa II outcomes to continental, regional and national policies.

Open discussion focussed on:

- *What are the policies each organisation is promoting linked to Tuning Africa II?*
- *How to enhance dissemination of Tuning Africa II outcomes and extend the debate to other higher education institutions in Africa?*
- *How to support Tuning implementation at institutional level?*

15.30 – 16.00

Coffee Break

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16.00 – 17.30 Strategies for dissemination of Tuning Africa II outcomes at continental, regional and national level. Inventory of possible approaches.

Wednesday 15 November 2017

Thon Hotel Brussels City Centre
Avenue du Boulevard 17
Brussels
Belgium

9.00 – 10.030 Discussion on how to implement Tuning Africa II outcomes at institutional level.
Exchange of views and experiences.
Recommendation of strategies for implementation.

10.30 – 11.00 Coffee Break

11.00 – 12.30 **Summary of the outcomes achieved in the TAPAG**
- Strategies for dissemination of Tuning Africa II outcomes
- Recommendations for implementation at different levels

12.30 – 14.00 Lunch: Thon Hotel Brussels City Centre

Departure



2. PARTICIPANTS

The organisational structure of the project is as follows:

- Management Committee
- 8 Subject Area Working groups
- TAPAG – Tuning Africa Policy Advisory Group

2.1 Management Committee

The responsibility of the Management Committee is to carry out specific tasks required by the project. It is made up of the 9 general co-ordinators of the project and other regional representatives. One co-ordinators of each SAG s will be joining the MC as well.

In addition, in the Management Committee there exists a Coordination Unit in charge of the practical aspects of taking the project forward, and responsible for the administrative and financial management involved in achieving this. This Coordination Unit will be assisted by an IT professional, in charge of keeping online forms and questionnaires up to date, managing virtual discussion fora, administration of the Portal, and the management of all technology necessary for the development of the project.

2.2 List of Participants by Subject Area

Currently, 123 academics from 105 African universities are participating in 8 working groups based around different disciplines (Agricultural Sciences, Applied Geology, Civil Engineering, Economics, High Education Management, Mechanical Engineering, Medicine and Teacher Education). The universities selected are centres of national excellence in the disciplines they represent and have demonstrated an ability to engage in dialogue with other institutions that work in the same knowledge areas. They have a significant presence in the system (size of the institution, track record, credibility and academic authority) such that a considerable part of the system is represented by their participation.

AGRICULTURAL SCIENCES

<p>Benin Université Catholique de l'Afrique de l'Oest , UCAO-UUC (Phase II)</p>
<p>Benin Université d'Abomey-Calavi</p>
<p>Burundi Université de Ngozi</p>



Cameroon Université de Dschang
Ghana University of Ghana
Ivory Coast Université Nangui Abrogoua
Kenya Egerton University
Madagascar Universite d'Antananarivo
Mauritius University of Mauritius
Morocco Université Mohammed Premier
Nigeria Federal University of Agriculture
Nigeria University of Ilorin
Senegal Université Gaston Berger
Sudan Sudan University of Science and Technology (Phase II)
Swaziland University of Swaziland (Phase II)

This initiative is implemented on behalf of the European and African Union Commissions by:





APPLIED GEOLOGY

Alger Ecole Nationale d'Ingénieurs de Tunis
Burkina Faso A2iE -Institut International d'Ingénierie de l'Eau et de l'Environnement
Cameroon Université de Maroua
Democratic Republic of Congo Université de Lubumbashi
Ethiopia Adama Science and Technology University
Ivory Coast Université des Sciences et Technologies de Côte d'Ivoire (USTCI)
Kenya Jomo Kenyatta University of Agriculture and Technology (JKUAT)
Lybia Sebha University
Madagascar Université d' Antananarivo
Mauritania Université des Sciences, Technologie et Médecine (USTM)
Nigeria University of Nigeria, NSUKKA
Rwanda University of Rwanda

This initiative is implemented on behalf of the European and African Union Commissions by:





South Sudan
Juba University

Tunisia
Faculté des Sciences de Tunis

CIVIL ENGINEERING

Alger
Université Mouloud Mammeri de Tizi Ouzou

Benin
Université d'Abomey-Calavi (Phase II)

Botswana
University of Botswana

Cameroon
Université de Douala

Cape Verde
Universidade Jean Piaget de Cabo Verde (Phase II)

Democratic Republic of Congo
Université de Kinshasa

Egypt
Assiut University (Phase II)

Egypt
Tanta University (Phase II)

Ethiopia
EiABC - Addis Ababa University

This initiative is implemented on behalf of the European and African Union Commissions by:





Ghana Kwame Nkrumah University of Science and Technology (Phase II)
Kenya Moi University
Nigeria Ahmadu Bello University
South Africa University of Pretoria
South Sudan Juba University
Tanzania University of Dar Es Salaam

ECONOMICS

Alger Université 8 mai 1945 Guelma
Angola Katyavala Bwila University
Burkina Faso UNIVERSITE OUAGA II
Cameroon Université de Yaoundé II
Cape Verde ISCEE - Instituto Superior Ciências Económicas e Empresariais
Democratic Republic of Congo Université de Goma (UNIGOM)

This initiative is implemented on behalf of the European and African Union Commissions by:





Djibouti Université de Djibouti
Egypt Cairo University
Eritrea College of Business and Economics
Ethiopia St. Mary's University
Ghana University of Professional Studies, Accra (UPSA)
Kenya Masinde Muliro University of Science and Technology (MMUST)
Lesotho National University of Lesotho
Morocco Université Hassan 1er de Settat
Nigeria University of Calabar
Tanzania Open University of Tanzania

HIGHER EDUCATION MANAGEMENT

Cameroon Université de Yaoundé II

This initiative is implemented on behalf of the European and African Union Commissions by:





Egypt Alexandria University
Ethiopia Jimma University
Ivory Coast Université Alassane Ouattara
Kenya Kenyatta University
Mauritius University of Mauritius
Nigeria Nnamdi Azikiwe University, Awka, Nigeria
Nigeria University of Ilorin
South Africa University of Kwazulu Natal
South Africa University of Pretoria
Tanzania University of Dar Es Salaam
The Netherlands independant Expert
Tunisia Université de Tunis

This initiative is implemented on behalf of the European and African Union Commissions by:





Uganda
Makerere University

MECHANICAL ENGINEERING

Alger
Akli Mohand Oulhadj (Phase II)

Cameroon
Universite de Yaounde I

Democratic Republic of Congo
Institut Supérieur de Techniques Appliquées , ISTA/KINSHASA

Democratic Republic of Congo
Université de Lubumbashi (Phase II)

Egypt
Cairo University

Egypt
Egypt-Japan University of Science and Technology (Phase II)

Eritrea
Eritrea Institute of Technology (Phase II)

Ethiopia
Dilla University (Phase II)

Ethiopia
Jimma University

Ghana
Kwame Nkrumah University of Science and Technology

This initiative is implemented on behalf of the European and African Union Commissions by:





Lybia University of Zawia (Phase II)
Malawi University of Malawi – The Polytechnic
South Africa Cape Peninsula University of Technology
South Africa Stellenbosch University
Tunisia Ecole Nationale d'Ingénieurs de Tunis
Zambia Copperbelt University

MEDICINE

Alger Universite d'Alger 1
Democratic Republic of Congo Université Catholique de Bukavu (Phase II)
Egypt Menoufia University (Phase II)
Egypt Suez Canal University
Ethiopia Mekelle University

This initiative is implemented on behalf of the European and African Union Commissions by:





Kenya University of Nairobi
Mali Université des Sciences, des Techniques et Technologies de Bamako (Phase II)
Morocco Université Cadi Ayyad de Marrakech
Mozambique Universidade Eduardo Mondlane (Phase II)
Nigeria Ebonyi State University Nigeria
Nigeria University of Ibadan
Senegal Universite Cheikh Anta Diop de Dakar
Senegal Université de Thiès (Phase II)
Somalia University of Health Sciences (Phase II)
South Africa University of Cape Town
Tunisia Faculty of Medicine of Monastir
United Kingdom Independant Expert

This initiative is implemented on behalf of the European and African Union Commissions by:





TEACHER EDUCATION

Angola Katyavala Bwila University (Phase II)
Botswana Botho University (Phase II)
Burundi Université Espoir d`Afrique (Phase II)
Egypt Alexandria University
Ethiopia Arsi University
Gabon Université Omar Bongo
Gambia University of The Gambia (Phase II)
Kenya African Virtual University (Phase II)
Mozambique Universidade Eduardo Mondlane
Namibia University of Namibia
Nigeria Benue State University Makurdi (Phase II)
Nigeria National Open University of Nigeria

This initiative is implemented on behalf of the European and African Union Commissions by:



Nigeria University of Nigeria, Nsukka
Somalia Mogadishu University
South Africa University of the Western Cape
Tanzania Open University of Tanzania
Uganda Makerere University, College of Education and External Studies School of Education
Zimbabwe University of Zimbabwe

2.3 List of Participants at Tuning Africa Policy Advisory Group (TAPAG)

Angola Fórum da Gestao do Ensino Superior nos Países e Regioes de Língua Portuguesa (FORGES)
Botswana Southern African Development Community (SADC)
Burkina Faso Conseil Africain et Malgache pour l' Enseignement Superieur (CAMES)
Egypt National Authority for Quality Assurance and Accreditation in Education (NAQAAE)
Ethiopia Ethiopian Chamber of Commerce and Sectoral Associations (ECCSA)

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Ghana All- African Students Union (AASU)
Ghana Erasmus Mundus Students and Alumni Association (EMA)
Kenya African Council For Distance Education (ACDE)
Kenya Pan African University (PAU)
Kenya Commission for University Education
Jordan Association of Arab Universities (AARU)
Mozambique National Council for Assessment and Quality Assurance of Higher Education (CNAQ)
Nigeria The African Quality Assurance Network (AfriQAN)
Nigeria Association of West Africa Universities (AWAU)
Nigeria ECOWAS Commission Abuja
Senegal National Authority for Quality Assurance (NAQA-Sud)
South Africa Southern African Regional Universities Association (SARUA)



Tanzania
Inter-University Council for East Africa

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3. WORKING DOCUMENT: SUBJECT AREA FINAL REPORT

ECONOMICS

Preface

Editors

Authors

Introduction to the subject area Economics

1.1 Definition of Economics

Economics is as old as man's civilization and human history is characterized by various forms of trade and exchange, management of human and material resources, vagaries of scarcity and choices as well as sub-national and national contemporary economic problems. At a glance, individuals without the economics lens view the world's economic problems in various dimensions, they see questions and problems without solutions. Knowledge of economics allows such individuals to view the world through a geometric icon. The icon is the clarity that economics science understand and solve contemporary domestic and global economic problems. Economics as a discipline is the lens, which provide the desired solutions and the platform to focus on the hidden socio-economic structures that shaped our world. The discipline provide the world with human resources that use economic theories and practical applications of economic principles to solve contemporary economic problems in the industrial capitalist and developing economies. These human resources also have the ability and capacity to treat economic problems from institutional, structural as well as economic perspectives with appropriate modifications in general economic principles, theories and policies.

In this regard, the economics team opted for a definition of economics that approximate the African context. The definition within this context is, economics is the institutionalization of government effectiveness, socio-economic transformation and utilization of human and natural resources to promote inclusive growth and sustainable development. Economics is split into microeconomics and macroeconomics. Whereas microeconomics focus on maximization of utility, profit and preference functions of individuals, households and firms, macroeconomics attempt to address macro issues such as unemployment, inflation, growth in gross domestic product (GDP), monetary and fiscal policies as well as exchange rate policies.

In most African universities, higher education courses in economics are offered in three cycles: first, second and third degrees levels. These various cycles of degrees usually lead to the award of Diplomas, Bachelor of Science, Master of Science as well as Doctor of Philosophy (PhD) degrees in economics. The duration of bachelor's degree is between three to four years, master's degree in economics has a maximum duration of four semesters and two semesters as the minimum. A PhD programme may last from three to five years depending on the university and the ability of the students.

1.1 Generic competence: A thematic perspective

At the Cairo meeting in October 2015, the Economics team was presented with eighteen (18) generic competences developed in January 2012 during Tuning Africa meeting in Cameroon. Generic competences are academic skills that are interrelated from one discipline to another. These competences are sets of coordinated knowledge acquired by a university graduates and have wider implications and applications for the sustainability of knowledge acquired. Generic in the sense that

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they transcend area of specialization and encompasses the whole essence of higher education. The economics team deliberated on the eighteen generic competences and agreed that they approximate the generic competences required of an economics graduate and subsequently adopted them. These generic competences are presented in table 2.0.

Table 2.0: Generic Competences

1	Capacity for conceptual thinking, analysis and synthesis
2	Ability to work professionally with respect to ethical values and commitment to Ubuntu
3	Capacity for critical evaluation and self-awareness
4	Ability to translate knowledge into practice
5	Ability to take relevant and objective decisions, and to propose practical, cost-effective solutions to problems
6	Capacity to use innovative and appropriate technologies
7	Ability to communicate effectively in official and local language
8	Ability to learn to learn and capacity for lifelong learning
9	Ability to demonstrate flexibility and adaptability to new situations
10	Self-confidence, ability for creative and innovative thinking
11	Capacity to demonstrate leadership, management and teamwork skills professionally
12	Ability to communicate effectively and demonstrate interpersonal skills
13	Sustainable environmental awareness and economic consciousness in professional decision making
14	Ability to work in an intra- and intercultural and/or international context
15	Ability to take initiatives and work independently
16	Ability to evaluate, review and enhance quality
17	Ability to manifest self-confidence and to exhibit/translate knowledge into practice with an entrepreneurial spirit
18	Commitment to preserve and to add value to the African identity and cultural heritage

1.2 Subject specific competences

Competences are a combination of skills, knowledge, abilities and understanding a student requires to achieve desired ends. To deepen competences the focus of any academic programme should not be only on the contents, but learning outcomes via the appropriate teaching format and methodology. Competences aid students to develop skills and capacity to excel in their work environment. Student can think out situations, articulate new ideas, innovate and evaluate.

In identifying the subject specific competences the economics team deliberated on a number of key issues. The team identified the fields of work for economists, occupation/fields of study presented in 3.1 and table 3.0 respectively. Core subject areas of economics, support courses as well as area of specialization were also deliberated on. The core elements used as basis included rational



behaviour, markets, economic policies, sustainable development, economic governance and institutions, ethics, innovation and creativity as well as the definition of economics within the African context. In the addition, the group also had interaction with African academics, students, employers of labour, graduates, and existing international professional standards for a career in economics provided the basis to generate seventeen subject specific competences.. Table 3.1 presents the subject specific competences.

3.1 Fields of Work for Economists

- Public institutions
- Non-governmental organizations
- Banks and other financial institutions
- Private companies
- Research institutions
- Schools and universities
- International organizations
- Self- employment
- Consulting companies

Table3.0 Occupation/ fields for Economists

Bachelors/L	Masters	PhD/D
<ul style="list-style-type: none"> • Bank clerks • Assistant stock exchange dealers • Commercial councilors • Assistant planning officers • Technical assistants • School teachers • Research assistants 	<ul style="list-style-type: none"> • Stock exchange dealers • Economic analysts • Financial analysts • Graduate assistant/ assistant lecturers • Economists • Planners • Statisticians • Portfolio Managers • Policy advisers • Research assistants 	<ul style="list-style-type: none"> • Policy advisers • Analysts • Senior Economists • Lecturers • Senior Consultants • Senior Planners • Directors • Managers • Researchers • International experts in economics • Trade negotiators • Entrepreneurs

3.1.1 Core subjects of Economics

- I. Microeconomics
- II. Macroeconomics
- III. Econometrics
- IV. Mathematics and statistics
- V. Research methods
- VI. History of Economic thought

3.1.2 Support Courses

- I. ICT
- II. Language courses/ communication skills



- III. Law
- IV. Ethics and logic courses
- V. Accounting

3.1.3 Specializations:

- I. Monetary economics
- II. Development economics
- III. International economics
- IV. International finance
- V. Managerial economics
- VI. Financial economics
- VII. Public sector economics
- VII. Labour economics
- VIII. Industrial economics
- IX. Agricultural economics
- X. Health economics
- XI. Energy economics
- XII. Public finance and fiscal policy
- XIII. Environmental economics
- XIV. Resource economics
- XV. Corporate finance
- XVI. Transport and logistics
- XVII. Microfinance
- XVIII. Demographic economics
- XIX. Project planning and management
- XX. Economics of education
- XXI. Industrial economics
- XXII. Welfare economics

Table 3.1: Subject Specific Competences (Economics)

1	Coherent understanding and application of economic principles.
2	Ability to apply economic principles in rational decision making and choice: consumption, production and exchange of goods and services
3	Ability to understand the operations and interdependence of markets.
4	Ability to use information communication technology (ICT) in economic transformation and growth.
5	Ability to perform economic computations in various spheres of manufacturing commodities and services
6	Ability to analyse economic data to make informed decisions.
7	Ability to assess the impact of economic policies on human and natural resources.
8	Ability to understand and evaluate the impact of social and economic institutions on effective governance and development.
9	Ability to identify, analyse and solve African and global economic issues and problems.
10	Ability to understand macroeconomic policies and draw policy recommendations.



11	Ability to understand and apply sustainable development policies and practices.
12	Ability to understand the operations and regulations of financial markets.
13	Possess skills to appraise, plan, manage, monitor and evaluate projects.
14	Ability to use economic tools to diagnose economic problems
15	Possess entrepreneurial innovative, creative and negotiation skills.
16	Ability to understand the operations and regulations of banks and microfinance institutions
17	Ability to understand the role, operations and regulations of international and regional institutions.

4.1 Consultation and Reflections

In addition to the subject specific competences developed by the economics team, the generic competences were distributed to four stakeholders in the participating universities. Namely academics, employers, students and graduates. In all one thousand one hundred and forty nine individuals (1149) responded to the generic competences questionnaire and nine hundred and ninety three (993) responded to the subject specific competences questionnaire.

The Economics group deliberated exhaustively on the survey results and set the lower threshold of 3.3 based on the rating of all four (4) stakeholders (Academics, Employers, Students and Graduates) to arrive at the six most important Generic and Subject Specific Competences identified by the stakeholders. The Economics group also carried out a comparative analysis of the generic and subject specific competences provided by Academics and Employers and used it as a basis to compare the responses of students and graduates.

The basis for using the Academics and Employers is because the input comes from the academics and the end-users are the employers. Therefore their opinion could indicate the input and output gap, which was an important criterion for our analysis. In addition to the identified six generic and subject specific competences, the team also examined the **ratings, rankings and achievements** of all four groups.

4.2 Analyses of Generic Competences Survey Results

Table 4.1: Identified Generic and subject specific competences

Generic Competences (G) identified by Group	Subject Specific Competences (SSC) identified by Group:
G1: Capacity for conceptual thinking, analysis and synthesis	SSC6: Ability to analyse economic data to make informed decisions
G10: Self-confidence, ability for creative innovative thinking	SSC1: Coherent understanding and application of economic principles
G5: Ability to take relevant and objective decisions	SSC2: Ability to apply economic principles in rational decisions making
G4: Ability to translate knowledge into practice	SSC10: Ability to understand macro-economic policies and draw policy recommendations

G3: Capacity for critical thinking, evaluation and self-awareness	SSC4: Ability to use information communication technology (ICT) in economic transformation and growth
G15: Ability to take initiative and work independently	SSC15: Possess entrepreneurial, innovative, creative and negotiation skills
G11: Capacity to demonstrate leadership, management, and team-work skills professionally	SSC13: Possess skills to appraise, plan, manage, monitor and evaluate projects
G12: Ability to communicate effectively and demonstrate inter-personal skills	SSC11: Ability to understand and apply sustainable development policies and practices

Table 4.2 shows the eight generic and subject specific competences identified by various stakeholders including the submission of economics team particularly for G11 and G12; SSC13 and SSC11 for subject specific competences. Academics identified six generic competences which were similar to the opinion of employers but differ in terms of ordering, these included (G1, G4, G10, G3, G5, G15). Students and graduate also identified six generic competences that are important to them. For students the important generic competences are G4, G10, G3, G1, G11, G5 and employers the important generic competence were G11, G10, G4, G3, G12, G5. Comparatively, the results for both students and graduate shows that whereas students felt G1 (capacity for conceptual thinking, analysis and synthesis) is important graduates thought otherwise and rather prefer G12 (ability to communicate effectively and demonstrate inter-personal skills) which represent a departure from the survey results of both academics and employers, and in addition to other five generic competences identified by both students and graduates.

Interestingly, academics and employers did not regard G11 and G12 as the six top generic competences, probably because leadership, management and team work skills as well as communications skills though very important are not part of the core elements of economics curriculum. Another possible reason is that leadership and management skills are acquired and evolve over time. Equally, as students and graduates interact in work place, they realize that these are important competences that makes a successful career. Based on the importance of G11 and G12 the economics group included them among the six generic competences earlier identified by the academics and employers to arrive at eight important generic competence.

The ranking of generic competences by the stakeholders revealed interesting results. A striking similarity is seen in ranking of generic competences by both academics and employers. For instance, both ranked G1 as top priority in rating of generic competences. They also included G5, G4 and G3 as the top four generic competences. Students and graduates ranked G4 as the most important generic competence and interestingly ranked G14 as the least of the generic competences.

Table 4.3: Top Generic Competences Identified by Stakeholders

S/ N	Top Position Generic Competence s	ACADEMIC			EMPLOYEES			STUDENTS			GRADUATES		
		imp	Ach	Ga p	Imp	Ach	Ga p	Imp	Ach	Ga p	Imp	Ach	Ga p
1	G1	3.5 4	2.6 0	0.9 4	3.4 1	2.8 3	0.5 8	3.3 1	2.6 4	0.6 7	3.3 4	2.8 3	0.5 1

2	G10	3.45	2.47	0.98	3.42	2.83	0.59	3.37	2.64	0.73	3.45	2.66	0.79
3	G5	3.40	2.50	0.90	3.46	2.64	0.82	3.29	2.54	0.75	3.36	2.77	0.59
4	G4	3.45	2.63	0.82	3.34	2.67	0.67	3.42	2.50	0.92	3.43	2.72	0.71
5	G3	3.42	2.57	0.85	3.38	2.63	0.75	3.31	2.61	0.70	3.38	2.67	0.71
6	G15	3.32	2.52	0.80	3.37	2.62	0.75	3.21	2.58	0.63	3.26	2.65	0.59
7	G11	3.26	2.54	0.72	3.32	2.74	0.65	3.31	2.62	0.69	3.45	2.87	0.58
8	G12	3.26	2.50	0.76	3.27	2.67	0.60	3.18	2.55	0.63	3.36	2.76	0.60

Imp= importance, Ach= Achievement, Gap= difference between importance and achievement

Source: Derive from the survey results

Table 4.4: Top Subject Specific Competences Identified by Stakeholders

S/N	Top Subject Specific Competences	ACADEMIC			EMPLOYEES			STUDENTS			GRADUATES		
		imp	Ach	Gap	Imp	Ach	Gap	Imp	Ach	Gap	Imp	Ach	Gap
1	SSC6	3.54	2.69	0.85	3.29	2.71	0.58	3.44	2.62	0.82	3.38	2.79	0.59
2	SSC1	3.50	2.89	0.61	3.24	2.78	0.46	3.36	2.70	0.66	3.27	2.88	0.39
3	SSC2	3.43	2.75	0.68	3.23	2.78	0.51	3.34	2.66	0.68	3.38	2.81	0.57
4	SSC10	3.40	2.68	0.72	3.26	2.72	0.54	3.42	2.59	0.83	3.20	2.83	0.37
5	SSC4	3.34	2.41	0.93	3.19	2.68	0.51	3.21	2.33	0.88	3.24	2.50	0.74
6	SSC15	3.26	2.30	0.96	3.27	2.54	0.73	3.31	2.40	0.91	3.26	2.50	0.74
7	SSC13	3.31	2.47	0.84	3.42	2.71	0.77	3.33	2.58	0.75	3.28	2.77	0.51
8	SSC11	3.18	2.43	0.75	3.16	2.56	0.60	3.27	2.45	0.82	3.16	2.62	0.54

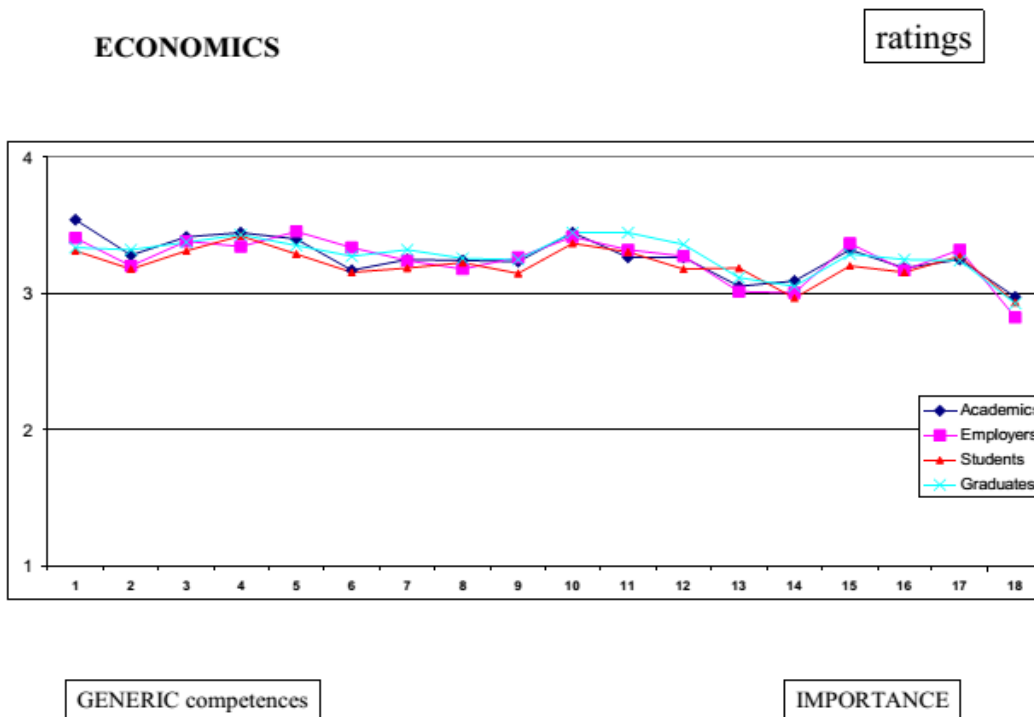
Source: Derive from the survey results



In terms of importance and achievement for academics based on the survey result, G1 had the highest achievement followed by G10, while G4 and G15 had the lowest achievement rate. For employers, G5 (ability to take relevant and objective decisions) had the highest rate of achievement whereas G15 and G4 were the lowest in terms of achievement. For students and graduates G4 and G10 had the highest achievement rate, which is a striking similarities. This seems to imply that from the point of view of both students and graduates, ability to translate knowledge into practice as well as self-confidence, ability for creative and innovative thinking are important elements expected from the teaching of economics.

Figures 4.1 and 4.2 show graphs of correlation matrix and achievements of the generic competences. From the figures the generic competences correlation matrix shows a close association of importance with respect to the four stakeholders. In terms of achievement of the subject area, the results showed a low level of achievement especially between academics and students as well as employers and students. The correlation score of 0.74 between academics and employers and 0.73 between academics and graduates showed some improvement when compared to a score of 0.64 between academics and students.

Fig 4.1: Correlations among groups

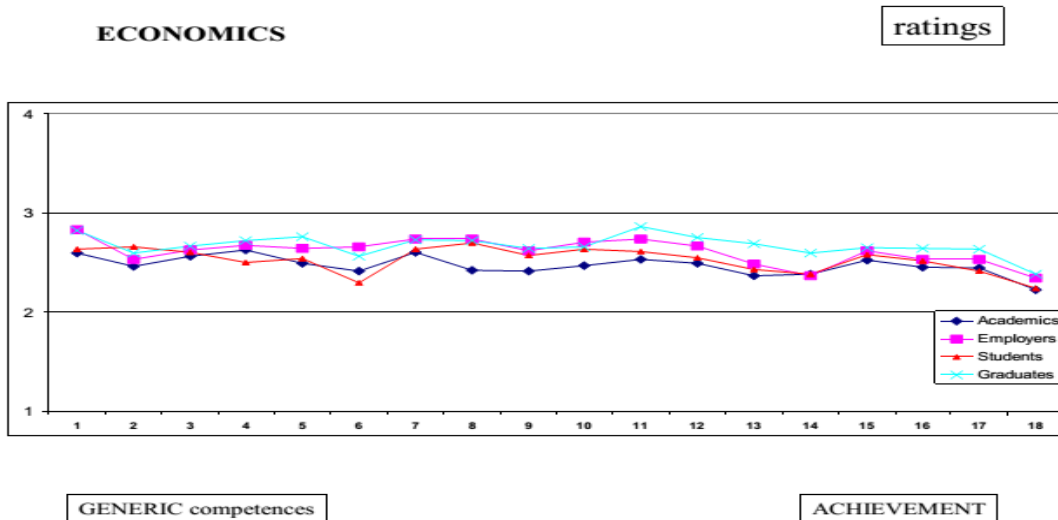


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Fig 4.2: Generic Competence achievement



4.3 Analyse Subject Specific Competences Survey Results

The survey results in table 4.4 showed similarity in the top six subject specific competences of both academics and employers. These are SSC6, SSC1, SSC2, SSC10, SSC4, and SSC14. Comparing the survey results of academics, employers, students and graduates indicated a disparity in what students and graduates considered as the six most important subject specific competences. Students and graduates included SSC13 and SSC15 among the top six subject competences. Skills to manage, evaluate projects as well as entrepreneurial, innovative, creative and negotiation skills are important requirement that bridged the gap between what is taught in the class room and the requirement of the industry. Therefore these two important subject specific competences identified by both students and graduates and also agreed by the economics team were included to make up eight most important subject specific competences.

Comparing importance and achievement and in the subject specific competences of the four stakeholders showed an interesting discrepancies and similarities. SSC4 recorded the highest achievement for academics followed by SSC1, and the lowest in terms of achievement for academics was SSC2. The survey results showed that for employers the best achievement was SSC13 (possess skills to appraise, plan, manage, monitor and evaluate project) and the least in this category was SSC2. For students and graduates the highest achievement rate was recorded in SSC15 and SSC15 respectively, which again demonstrated another striking similarities in the rating of both students and graduates. For academics wide disparity is seen between importance and achievement in SSC4, SSC9 and SSC15 subject specific competences. Similar analysis could also be observed for employers, students and graduates.

The correlation matrix shows disparity among the stakeholders in the terms of importance, achievement and ranking. Correlation score of 0.57 between academics and employers in terms of importance of the subject specific competences suggested gap in teaching and expected outcomes from employers. The correlation between employers and graduates improved to 0.77 in importance. The achievement score of 0.79 for academics and employers strongly suggested some improvement when compared to the same group in the generic competences. The ranking was also

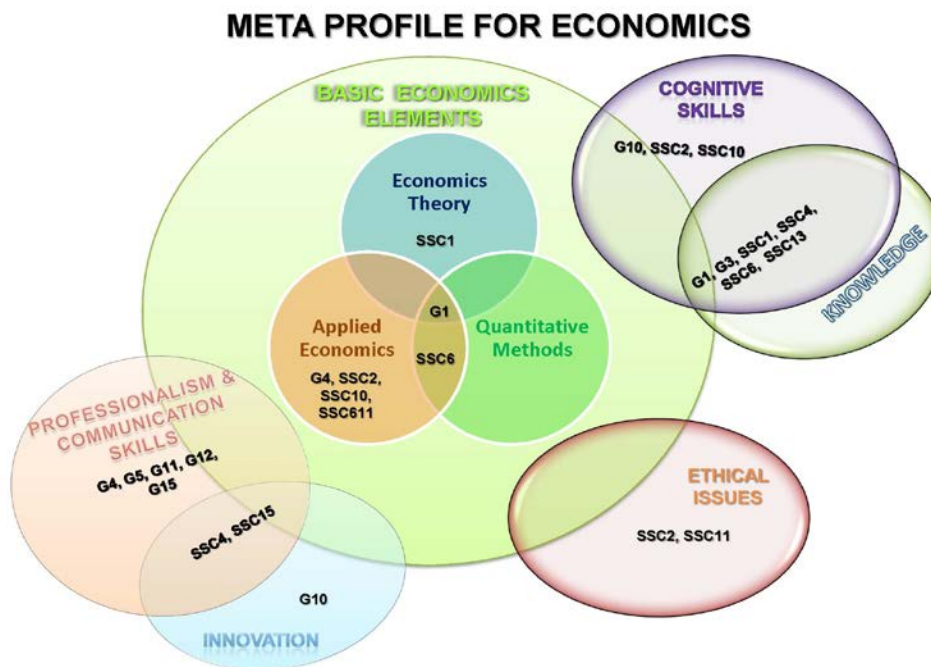
low in terms of academics and employers, high for academics and students and also high between academics and graduates.

5. Building Meta-Profiles

The group after developing its generic and subject specific competences, proceeded to build a meta-profile to reflect the two groups of competences. Further common themes were identified under the Basic Elements. Other subsets on the basic elements includes, Economic Theory, Quantitative Methods, and Applied Economics. The team also identified other core elements are; cognitive skills, knowledge, innovation, professionalism and communication skills and ethical issues. The meta-profile reflects the identified elements and elaboration of, and combination of all generic and subject specific competences.

The meta-profile describes the three basic elements required in economics degree and other core elements linked to the three basic elements. It also shows the inter-relationship of generic and subject specific competences to the entire sub-sets of core elements. A graduate of economics besides acquiring basic knowledge in economic theory, quantitative methods and applied economics, needs cognitive skills, should understand ethical issues associated with the profession, he would require professional and communication skills, innovative skills and knowledge. Generic competence one (G1) and subject specific competence 6 (SSC6) are essential competences that linked the three basic elements of economics.

Fig. 5.0: Economics Meta-Profile



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In addition to the three basic elements, graduates of economics profession would require cognitive skills and knowledge and therefore G1, G3, G10, SSC1, SSC4, SSC6, SSC2, SSC10 and SSC13 are essential elements of economics curriculum. In order to bridge the gap in the learning frontier and produce economics graduate that approximate real world situations, ethical issues, SSC2 and SSC11 subject specific competences required incorporation into the degree profile. Professionalism and communication skills as well as innovation are essential core elements of economics graduates. In this regards, G4, G5, G10, G11, G12, G15, SSC4 and SSC15 are integral elements of economics curriculum.

The overall views of stakeholders were satisfactory and in tandem with the expectations of the economics team. In addition, sustainable development (SSC11) must also be put into serious consideration especially for African economies. Although the stakeholders did not consider it of importance. The ranking of the three stakeholders academic, students and graduates showed that they share the same view. This demonstrates a strong correlation in what they view as more important. Even though students and employers on average have a common view on the ranking of importance of the SSC. The lowest correlation is seen among the ranking by academics and employers.

Competencies that are known to be of important to all the stakeholders have large gaps between important score and achievement score. Hence, the need to consider these competencies when designing and implementing the program. In relation to ranking of the five top generic competencies we realize that the competencies chosen by academic and employee are similar with exceptions of G2 and G6. The ranking by students and graduates are also similar but differs in ordering.

5.1 Student Workload

The participants agreed on the revised questionnaire but expressed some doubts that students will be able to give exact information on their work loads. It was agreed that participants of this project takes the responsibility of distributing the questionnaires to the students and further make a follow up on this. It was noted that the questionnaire will be available on the internet. To the question whether or not students were “provided information on the number of hours planned for independent work and also the opportunity to give feedback on the work load”, the group argued that such information were not provided to the students, hence the answer was “no”.

6.0 Two examples of revised programme

The dynamics of higher education demands that emphasis should shift from teacher centred learning to student centred learning. Whereas in teachers’ centred learning the focus is on assimilation of contents through lectures, assignment/tests and examination while in student centred approach, students are assisted to create knowledge and opportunity for life-long learning. In the new approach, each course is structured at the beginning in such a way that objectives of the course and the intended learning outcomes (ILOS) are clear to students, expected in-class and out-of-class work, course programme are built based on what knowledge and skills a student demonstrate through measurable indicators as well as promote individual learning. The teacher does not only include compulsory lectures, seminars, laboratory work but also contact hours. This allows teachers to help students control their self-study. A sample of a typical course outline that could be adopted with appropriate modifications in the new programme is presented in table 6.1.

The student centred approach is to be adopted in teaching the revised programme in line with Tuning Methodology. This approach allows teachers to align teaching, learning and assessment to achieve the intended learning outcomes (ILOs). It also requires that the method of giving students task needs to change. The focus of lecture and assessment should be to achieve the ILOs. To this



end two revised programmes are presented one English and French speaking to reflect the language characteristics of the economics group.

Table 6.1: Intended learning outcome and graduate attributes

Course Code: ECO 411-Advanced Microeconomics

Course Objective

The Objective of this course is to provide advanced quantitative and qualitative treatments of microeconomic analysis through the investigation of the fundamental economic problem - the allocation of scarce resources and distribution.

Course Description: This course covers advanced topics in microeconomic analysis including: formal treatment of consumer theory and firm behaviour, decision making under uncertainty, competitive, monopoly and oligopoly markets, general equilibrium theory, overlapping generation models and growth theory, game theory under complete and incomplete information.

The contents and the intended learning outcomes will be covered through lectures, students' individual and group presentations, practical applications of the course and solving problems, assignments and class workshops. You are required to take important note of class discussions and any take home assignments. Class attendance is mandatory.

Intended learning outcomes (ILO) and generic graduate attributes

ILOs	Expected Ability	Weeks of delivery	Lecturers	Graduate Attribute/skills
ILO1: Analyse, calculate, predict and contrast the behaviour economic agents in different institutional environment	<ul style="list-style-type: none"> -Construct, describe and manipulate utility representation of individual agent's preferences (Ordinal approach) -Construct, describe and manipulate production and cost functions -create and solve consumer and producer optimization problem and undertake comparative static exercises -describe how uncertainty affects economic agent's decision making. -interpret what solution to an economic optimization problem embodies 	1-3		<p>Knowledge: Extensive functioning of core areas of modern microeconomic theory</p> <p>Comprehension: Discuss microeconomic theory and principles then apply it to solve microeconomic problems</p>
ILO2: Evaluate the relationship between market structure, game	<ul style="list-style-type: none"> -Identify, describe and compare various market structures -describe and use the 	4-7		<p>Application: Apply microeconomic theory to welfare and distributional effects of</p>



theory, equilibrium and efficiency	<p>concept of game theory and equilibrium to applied microeconomics.</p> <p>-compute the equilibrium of various markets and investigate its welfare properties</p> <p>-describe game theory and its application to complete and incomplete information</p> <p>-communicate the concept of economic efficiency and identify if solutions to economic agent's optimization problems are efficient</p> <p>- explain firms growth theory</p>			economic policy
ILO3: Design and evaluate complex microeconomic mechanisms	<p>-describe the components of general equilibrium.</p> <p>-investigate how different institutional environments affect general equilibrium analysis</p> <p>-examine equilibrium agents' behaviour in various markets</p>	8-10		Analyses: Appraise microeconomic theory and critically evaluate the implication of equilibrium in allocation of resources in various markets.
ILO4: Summarize and appraise various microeconomic theory and principles in oral and written form	Develop and justify an argument in both oral and written.	11-12		Evaluation: Summarize in written and oral presentation the effects of public or private monopoly on allocation and distribution of resources. (communication skills)

Assessment: class discussions and presentations 20marks; short essay 20marks; semester examination 60 marks.

6.2 Revised Economics Degree programme: University of Calabar, Calabar, Nigeria

Key Aspects	University of Calabar, Calabar, Nigeria
1.Name of the revised programme	Bachelor of Science degree in Economics (B.Sc. Economics). The programme will be domiciled in the Faculty of Social Sciences,



<p>2. Social need of the revised programme</p>	<p>University of Calabar, Nigeria</p> <p>Public policy and business decisions are becoming increasingly dynamic in developing countries. Public institutions and industry are also demanding individuals who can adjust to these dynamics. Indeed individuals with certain subject specific and generic competences are the ones who possess the required cognitive skills to fit in. therefore this programme is design to adopt the teaching methodology of Tuning Academy-student centred teaching with clearly defined intended learning outcomes (ILOs).</p>
<p>3. Description of the degree profile of the revised programme in terms of generic and/or subject specific competences</p>	<p>Objective: Produce graduates who with the help of theories and practical applications of economic principles can solve contemporary economic problems in the industrial capitalist and developing economies; and who have the ability and capacity to treat economic problems from institutional and structural (non-economic) as well as economic perspectives with appropriate modifications in general economic principles, theories and policies.</p> <p>Generic Competences:</p> <ol style="list-style-type: none"> 1 Capacity for conceptual thinking, analysis and synthesis 2 Ability to work professionally with respect to ethical values and commitment to Ubuntu 3 Capacity for critical evaluation and self-awareness 4 Ability to translate knowledge into practice 5 Ability to take relevant and objective decisions, and to propose practical, cost-effective solutions to problems 6 Capacity to use innovative and appropriate technologies 7 Ability to communicate effectively in official and local language 8 Ability to learn to learn and capacity for lifelong learning 9 Ability to demonstrate flexibility and adaptability to new situations 10 Self-confidence, ability for creative and innovative thinking 11 Capacity to demonstrate leadership, management and teamwork skills professionally 12 Ability to communicate effectively and demonstrate interpersonal skills 13 Sustainable environmental awareness and economic consciousness in professional decision making 14 Ability to work in an intra- and intercultural and/or international context 15 Ability to take initiatives and work independently

	<p>16 Ability to evaluate, review and enhance quality</p> <p>17 Ability to manifest self-confidence and to exhibit/translate knowledge into practice with an entrepreneurial spirit</p> <p>18 Commitment to preserve and to add value to the African identity and cultural heritage</p> <p>Subject Specific Competences</p> <p>1 Ability to understand the budgetary process and link to business cycle.</p> <p>2 Ability to apply economic principles in rational decision making and choice: consumption, production and exchange of goods and services</p> <p>3 Ability to understand the operations and interdependence of markets.</p> <p>4 Ability to use information communication technology (ICT) in economic transformation and growth.</p> <p>5 Ability to perform economic computations in various spheres of manufacturing commodities and services</p> <p>6 Ability to analyse economic data to make informed decisions.</p> <p>7 Ability to assess the impact of economic policies on human and natural resources.</p> <p>8 Ability to understand and evaluate the impact of social and economic institutions on effective governance and development.</p> <p>9 Ability to identify, analyse and solve African and global economic issues and problems.</p> <p>10 Ability to understand macroeconomic policies and draw policy recommendations.</p> <p>11 Ability to understand and apply sustainable development policies and practices.</p> <p>12 Ability to understand the operations and regulations of financial markets.</p> <p>13 Possess skills to appraise, plan, manage, monitor and evaluate projects.</p> <p>14 Ability to use economic tools to diagnose economic problems</p> <p>15 Possess entrepreneurial innovative, creative and negotiation skills.</p> <p>16 Ability to understand the operations and regulations of</p>
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	<p>banks and microfinance institutions</p> <p>17 Ability to understand the role, operations and regulations of international and regional institutions.</p>														
<p>4. Definition of the length and level of the programme</p>	<p>This is a four year programme leading to the award of a Bachelor of Science degree in Economics. The programme has 2 semester of 14 weeks each per session, this translates to 8 semesters for the duration of the programme. At the end of the programme, students who graduate with cumulative grade point of 3.0 and above can proceed into a Master's degree programme.</p> <p>The materials for the programme will be delivered through lectures, students' presentations and solving problems in assignments, workshops, seminars, tutorials, class/group work, use of econometrics laboratory etc.</p>														
<p>5. Identification of future fields, sectors of employment/occupation of graduates</p>	<p>The future fields/opportunities open to graduates of Economics include: Public institutions –Central banks, finance ministry, ministry of planning and budget, Non-governmental organizations, Banks and Capital markets, stock brokers and other financial institutions, Private companies, Research institutions, Schools and Universities, International financial organizations such as the World Bank, IMF, Self-employment, Consulting companies.</p>														
<p>6. Linking of the programme competences with the agreed Economics degree Meta-profile</p>	<p>The basic elements required in economics degree and other core elements linked generic and subject specific competences totalling eight are listed below.</p> <table border="1" data-bbox="634 1094 1456 1822"> <thead> <tr> <th data-bbox="634 1094 1000 1178">Generic Competences (G) identified by Group</th> <th data-bbox="1000 1094 1456 1178">Subject Specific Competences (SSC) identified by Group:</th> </tr> </thead> <tbody> <tr> <td data-bbox="634 1178 1000 1283">G1: Capacity for conceptual thinking, analysis and synthesis</td> <td data-bbox="1000 1178 1456 1283">SSC6: Ability to analyse economic data to make informed decisions</td> </tr> <tr> <td data-bbox="634 1283 1000 1388">G10: Self-confidence, ability for creative innovative thinking</td> <td data-bbox="1000 1283 1456 1388">SSC1: Coherent understanding and application of economic principles</td> </tr> <tr> <td data-bbox="634 1388 1000 1493">G5: Ability to take relevant and objective decisions</td> <td data-bbox="1000 1388 1456 1493">SSC2: Ability to apply economic principles in rational decisions making</td> </tr> <tr> <td data-bbox="634 1493 1000 1598">G4: Ability to translate knowledge into practice</td> <td data-bbox="1000 1493 1456 1598">SSC10: Ability to understand macro-economic policies and draw policy recommendations</td> </tr> <tr> <td data-bbox="634 1598 1000 1745">G3: Capacity for critical thinking, evaluation and self-awareness</td> <td data-bbox="1000 1598 1456 1745">SSC4: Ability to use information communication technology (ICT) in economic transformation and growth</td> </tr> <tr> <td data-bbox="634 1745 1000 1822">G15: Ability to take initiative and work independently</td> <td data-bbox="1000 1745 1456 1822">SSC15: Possess entrepreneurial, innovative, creative and negotiation</td> </tr> </tbody> </table>	Generic Competences (G) identified by Group	Subject Specific Competences (SSC) identified by Group:	G1: Capacity for conceptual thinking, analysis and synthesis	SSC6: Ability to analyse economic data to make informed decisions	G10: Self-confidence, ability for creative innovative thinking	SSC1: Coherent understanding and application of economic principles	G5: Ability to take relevant and objective decisions	SSC2: Ability to apply economic principles in rational decisions making	G4: Ability to translate knowledge into practice	SSC10: Ability to understand macro-economic policies and draw policy recommendations	G3: Capacity for critical thinking, evaluation and self-awareness	SSC4: Ability to use information communication technology (ICT) in economic transformation and growth	G15: Ability to take initiative and work independently	SSC15: Possess entrepreneurial, innovative, creative and negotiation
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	G12: Ability to communicate effectively and demonstrate inter-personal skills	SSC11: Ability to understand and apply sustainable development policies and practices
7. Definition of the competences (revised programme)	Competences	Definition of Competence
	a) comprehensive understanding of economic theory	i. Coherent understanding and application of economic principles
	b) Application of economic theory	i. Ability to translate knowledge into practice ii. Ability to apply economic principles in rational decisions making iii. Ability to understand macro-economic policies and draw policy recommendations iv. Ability to understand and apply sustainable development policies and practices v. Ability to communicate effectively and demonstrate inter-personal skills
	C. Understand quantitative methods in economics	i. Capacity for conceptual thinking, analysis and synthesis ii. Ability to analyse economic data to make informed decisions
	d. Professionalism and communication skills	i. Ability to translate knowledge into practice ii. Ability to take relevant and objective decisions iii. Capacity to demonstrate leadership, management, and team-work skills professionally iv. Ability to communicate effectively and demonstrate inter-personal skills v. Ability to take initiative and work independently
	e. Understanding ethical Issues	i. Ability to apply economic principles in rational decisions making ii. Ability to understand and

		<p>apply sustainable development policies and practices</p> <p>f. Innovation Skills i. Self-confidence, ability for creative innovative thinking</p> <p>g. Knowledge i. Capacity for conceptual thinking, analysis and synthesis ii. Capacity for critical thinking, evaluation and self-awareness iii. Coherent understanding and application of economic principles iv. Ability to use information communication technology (ICT) in economic transformation and growth v. Ability to analyse economic data to make informed decisions vi. Possess skills to appraise, plan, manage, monitor and evaluate projects</p> <p>h. Cognitive skills i. Self-confidence, ability for creative innovative thinking ii. Ability to apply economic principles in rational decisions making iii. Ability to understand macro-economic policies and draw policy recommendations</p>
<p>8. Specification of the level of competences in each component of the programme</p>	<p>This revised programme in Economics is designed to bridge the gap between employers of economics graduates as well as developed the required skills, knowledge and understanding of economics and other learning outcomes through lectures, field study, practical classes, seminars, supervised project works. At the end of the study the required competences are:</p> <p>(a) Professional and academic competences</p> <p>i. Demonstrate the ability to translate knowledge into practice ii. Capacity for conceptual thinking, analysis and synthesis iii. Capacity for critical thinking, evaluation and self-awareness iv. Take relevant and objective decisions v. Capacity to demonstrate leadership, management, and team-work skills professionally vi. Communicate effectively and demonstrate inter-personal skills vii. Take initiative and work independently viii. Organize training and teaching in formal and informal educational institutions ix. Analyse economic data to make informed decisions</p>	



	<p>x. Appraise, plan, manage, monitor and evaluate projects</p> <p>b) Programme-specific competences</p> <p>i. Understand and apply economic principles ii. Translate knowledge into practice iii. Apply economic principles in rational decisions making iv. Understand macro-economic policies and draw policy recommendations v. Understand and apply sustainable development policies and practices vi. Self-confidence, ability for creative innovative thinking</p>
<p>9. Description of the expected learning outcomes related to the competences</p>	<p>On completion of this programme, graduates will be able to:</p> <ul style="list-style-type: none"> • Explain budget processes and fiscal discipline and fiscal strategy • Discuss contemporary economic problems and proffer solutions • Design community and national project, evaluate and monitor them • Evaluate macroeconomic policies that approximate each specific locality • Demonstrate self-confidence, innovative and creative skills • Analyse economic principles and sustainable development issues • Take initiative and demonstrate leadership skills • Possess good communication skills and entrepreneurship
<p>10. Description of the methodology</p>	<p>Lectures, assignments, seminar, case studies project, group work, essays, reflection and class discussion. Continuous assessment and examinations.</p>
<p>11. Specification of the units of the programme (courses and modules)</p>	<p>ECO 111 Economic Principles I & II (4 Units)</p> <p>An introduction to the nature of economic science and its basic problem of scarcity; the methodology of economic and major areas of specialization; historical development of ideas, major findings in the various areas of specialization; elementary principles of micro and macro-economics, current issues of interest and probable future developments.</p> <p>ECO 141 Mathematics for Economists I & II (4 Units)</p> <p>The course begins with mathematical concepts in the social sciences; gradual focus on Set theory; factors and exponents; logarithms; trigonometry; different types of equations as well as functions and progressions. Other topics include: Co-ordinate geometry; trigonometric functions and their inverse; Inequalities, Matrix algebra, and differentiation. The course will introduce calculus, exponential and logarithmic functions, Economic applications, implicit functions and differential as well as permutations and combinations etc.</p> <p>ECO 152 Introduction to Accounting (2 Units)</p>



	<p>The course commences with the nature, scope and purpose of accounting and introduces basic financial statements and accounting conventions. It covers theory and mechanics of double-entry book-keeping and books of original entry; cash book and the ledger, classification, recording and summary of business transactions are also introduced. In addition, revenue accounts and balance sheets of business concerns, valuation of assets and measurement of business income are discussed. It concludes with interpretation of accounts; significant accounting ratios, and sources and application of funds statements.</p> <p>SOC 141 Introduction to Psychology (2 Units)</p> <p>Basic orientation of the discipline and subject matter; basic theoretical orientations and how psychology relates to other social sciences disciplines. Basic research methods in psychology are introduced and the uses of psychology in modern life are discussed.</p> <p>ECO 101 Introduction to Sociology (2 Units)</p> <p>Introduction to basic problem of sociology and sociological perspective, major theoretical schools and building blocks of society; research methods; culture, socialization and deviance; societal response to deviance and criminality; social differentiation and stratification; main social institutions in society; and social change are discussed.</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>200 – Level Courses</p> </div> <p>ECO 211 Micro-Economics I (4 Units)</p> <p>Micro-economic theory is introduced; other topics include; problem of scarce resources and allocation of resources in product and factor markets with application to Nigerian and other economies; equilibrium concept possibility of disequilibrium, partial equilibrium and general equilibrium analyses are discussed. Supply and demand theory and the cobweb theory are introduced along with introductory dynamics and consumer behaviour. Other topics include general equilibrium of exchange; production theory; and cost curves. Other topics are pricing and output under perfect competition, imperfect competition, monopoly and monopolistic competition. The course concludes by examining pricing of production factors and theory of comparative costs.</p> <p>ECO 221 Macro-Economics I (4 Units)</p> <p>Macro-economic theory is introduced along with national income accounting, macro-economic aggregates as well as the classical system-namely Keynesian system and the monetarist system. Other</p>
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	<p>topics include domestic economic stabilization, monetary and fiscal policies, price control and inflation.</p> <p>ECO 251 Structure of the Nigerian Economy I & II (4 Units)</p> <p>Beginning with the analysis of development of the Nigerian economy in the pre-colonial and post-colonial periods, the course also covers the development of economic and social organizations, the role of agriculture, industry, as well as monetization and banking. It also examines the role of international trade in Nigerian economic development. In addition, growth of income, employment, wages and prices are discussed as well as public development institutions, national income and expenditure. The related topics of monetary and fiscal policies, monetary institutions, trade and transport systems and contributions of sectors of the Nigerian economy to national output, relationship between these sectors are also discussed.</p> <p>ECO 231 Mathematics for Economists I & II (4 Units)</p> <p>This course builds on ECO 102 and proceeds with derivatives of trigonometric functions; sequences and series; expansions and Taylor's theory. It covers Mathematical analysis of basic theories of economics as well as partial and total derivatives, differentials and difference equations. It also covers applications of partial derivatives, maxima and minima as well as Lagrange multiplier; Linear algebra; Matrix algebra and Inverse matrix. Other topics include simultaneous linear equations; introduction to linear programming and in-put output analysis etc.</p> <p>ECO 261 Principles of Financial Economics (2 Units)</p> <p>Forms money and theories of finance; finance and the modern economy; finance and economic activities are introduced. Other topics in the course include finance and technology; plastic money and developing countries as well as finance and international trade; currency value in national and international trade.</p> <p>SSC 241 Applied Statistics (4 Units)</p> <p>The course examines the role and significance of statistics in Social Science research and proceeds with the logic and basis of inferential statistics (sampling design and selection). It also covers sampling distribution and point and interval estimates of parameters as well as the logic of hypothesis testing. Tests of significance for nominal, ordinal level, interval and ratio level are also discussed as well as measures of association for nominal, ordinal, interval and ratio levels. It concludes with simple regression, index number and unit normal distribution.</p> <p>ECO 271 Theories of Human Resources (4 Units)</p> <p>The course begins with a review of various theories of human resources and their application to practical situations in industry and public service. Topics include human resources in Nigeria and their distribution in different regions of Nigeria, Africa and the global</p>
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	<p>economy.</p> <p>ECO 281 Labour Economics (2 Units)</p> <p>Nature of labour problems in developing countries is introduced and topics such as labour force, definition and concepts, determinations of size and composition of labour force are discussed. Also discussed are concepts of unemployment; industrial and occupational distribution of labour force. Other topics are informal sector and the modern sector, labour market theories, economics of wage determination, features of the Nigerian labour market and manpower development.</p> <p>ECO 208 Financial Accounting (2 Units)</p> <p>The nature, scope and purpose of accounting are discussed as are basic financial statements, accounting conventions. The course also covers theory and mechanics of double-entry book-keeping; book of original entry; the cash book and the ledger, classification, recording and summary of business transactions. Other topics include, the revenue accounts and balance sheets of business concerns; the valuation of assets and measurement of business income; and the interpretation of accounts as well as significant accounting ratios.</p> <p>ECO 282 Urban and Regional Economics (2 Units)</p> <p>Main forms of economic activities in urban areas, formal and informal sectors are introduced, and topics such as issues of access to credit, regulation of the economy; economy of regions such as West Africa, East and Southern Africa; regional blocks such as ECOWAS, G7, etc are discussed.</p> <div style="border: 1px solid black; padding: 5px; text-align: center;">300 – Level Courses</div> <p>ECO 311 Intermediate Micro-Economic Theory (4 Units)</p> <p>This is a more advanced and mathematical treatment of micro-economic theory with incorporation of linear programming; advanced price and output determination under perfect competition, oligopoly and monopoly. The course also covers exchange theory, offer curves, and contract curves as well as introduction to capital theory and types of production functions.</p> <p>ECO 321 Intermediate Macro-Economic Theory (4 Units)</p> <p>The course begins with the concept of national income, classical Keynesian and monetarist systems compared but also cover problems of unemployment and inflation and IS–LM analytical apparatus in discussion of the relative effectiveness of monetary and fiscal policy.</p> <p>ECO 341 History of Economic Thought I & II (4 Units)</p>
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	<p>Comparative survey and assessment in economic thought is examined as are the ideas of the early Christian fathers and Islamic Ideas on economic activity. Topic include classical economics, neo-classical school of thought, positive and welfare schools of economic thought, institutional economics, Keynesian school of Economic thought as well as evolution and contemporary development in economics and future prospects are examined; Marginalists and modern schools of economic thought and African economic ideas and future prospects are also discussed.</p> <p>ECO 331 Elementary Econometrics (2 Units)</p> <p>Beginning with extensions of the two – variable linear model the course also covers introduction to matrix algebra and algebra of econometrics. The general linear model and generalized least square procedure, violations of linear model assumptions and the correction of serial correlation (autocorrelation) of the errors, intercorrelation (Multicollinearity) of the variables, stochastic regressions and errors in variables are also discussed. Other topics are identification of problems, meaning, detection and correction, simultaneous models and estimations, k0class estimators and the choice of estimators. Students will be engage in practical solution of problems and familiarity with the computer.</p> <p>ECO 371 Project Evaluation (4 Units)</p> <p>Definition and classification of projects and project evaluation are introduced and project and the overall view of development programme data requirements discussed. Topics in the course include location and size of projects, calculation of investments required for a project, and evaluation of projects. Other topics are appraisal of projects from commercial and social view points and cash flow analysis</p> <p>ECO 351 Economics of Development (2 Units)</p> <p>The distinction between development and growth is introduced and development and underdevelopment, theories of development are examined. Various theories such as classical, Marxian, Schumpeterian and Harrod–Domar, Characteristics of a developing country, obstacles to development and strategy to remove them are discussed. Topics such as dualism, balanced and unbalanced growth, resource of technology, international trade and aid policy issues and case studies are also discussed.</p> <p>ECO 342 International Economics I & II (4 Units)</p> <p>The course covers introduction to the theory of trade and international finance incorporating presentation of various theories of international trade, foreign trade protection, economic integration and balance of payments. It also covers foreign aid capital flows and the uses of international economics in explaining contemporary international relations and diplomacy.</p>
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	<p>ECO 361 Public Sector Economics (2 Units)</p> <p>The concept of the public sector is examined and the pricing, investment and financing of public sector enterprises discussed. The role of the public sector and economic development is examined as well as analysis of selected public policies; special attention will be paid to the public service in Nigeria.</p> <p>ECO 362 Operations Research (2 Units)</p> <p>The course will concentrate on applications of economic analysis to real life situations and will also cover linear programming, non-linear programming, game theory, queuing-models, Markov chains, and simulation.</p> <p>ECO 391 Political Economy (2 Units)</p> <p>The basic distinguishing features of bourgeois methods of economic analysis and the dialectical methods and historical materialism are examined. The course also covers classification of social systems and theory of social classes. Topics also include Marxist theory of capital accumulation, surplus value; states of capitalist development; emergence and advancement of capitalism. The related topics of metropolitan and satellite economic relations; the struggle against colonialism are also covered.</p> <p>ECO 382 Applied Monetary Economics (2 Units)</p> <p>The structure and functions of financial systems and markets, banking operations and processes, the role of Central Bank in regulating banks, general outlines of financial institutions are discussed; markets and their roles; competition between banks and other financial institutions; theory of money, money supply and demand; stabilization policy; international adjustments and liquidity.</p> <p>ECO 312 Management Accounting (2 Units)</p> <p>The course will cover principles of management accounting in manufacturing, installation of costing systems, and service industries, costing elements and classifications, labour cost control and remunerations, service costing, job/batch costing and contract accounts. It also includes service costing and process costing, performance evaluation and controls.</p> <p>ECO 392 Mathematical Economics I (2 Units)</p> <p>Students will concentrate on linear and non-Linear Models; static and Dynamic Models; Advanced treatment of Input-Output analysis; general Equilibrium Analysis and Mathematical programming. It will also cover Dynamic programming; optimal control theory with emphasis on Bellman and Pantryagin Approaches; Game theory and applications, linear, and Differential Equation Systems.</p> <p>ECO 372 Financial Institutions (2 Units)</p>
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	<p>The structure and functions of financial systems and markets are examined as are general outlines of financial Institutions. Theory of money, supply and demand are also studied. Other topics are demand and supply of financial Assets; Determination of money stock, interest and prices; stabilization Policies: meaning of Monetary Policy, techniques, and effects. It concludes by examining policy objectives, conflicts, trade off and co-ordination; and International Adjustment and liquidity.</p> <p>ECO 351 Monetary Economics I & II (4 Units)</p> <p>The course examines the framework for monetary analysis and discusses whether this should focus on money or wealth. Other topics covered are supply of money theories; wealth effect mechanism of monetary policy, and inflation. The firm, diversification in mergers and innovation, investment economics, risk, and uncertainty. The course will also examine, the cost of capital, sources of finance; industrial pricing and marketing, pricing and marketing public goods; government intervention in industry and public policy, industrial location; industrial practices and policies in Nigeria and factors of fixed investment demand, Central banks and its operation</p> <p>400 - Level Course</p> <p>ECS 411: ADVANCED MICRO ECONOMIC THEORY (4 Units)</p> <p>General equilibrium, welfare economics, externalities, observable demand theories, The marginalist controversy, Money in general equilibrium. Average cost and limit pricing, Controversies in the off value. Alternative theories of distribution, Marginalist theories of the firm.</p> <p>ECS 431: BUDGET PROCESS AND FISCAL STRATEGY (4 Units)</p> <p>Objectives of budget, medium term perspective in budget, incremental budget, zero budget, open-ended process, excessive bargaining and conflicts avoidance, dual budget, fiscal responsibility act, macroeconomic and policy context and fiscal strategy.</p> <p>ECS 451: PROBLEMS AND POLICIES OF DEVELOPMENT (2 Units)</p> <p>Theories and patterns of development: modernization, dependencies and Marxian approaches, Capitalist and socialist pattern of development, Planning models. Resources in development (the roles of population, labour, education, health, capital and fiscal and financial policy), Foreign investment, Trade, technology and development. Sectional problems; agriculture and natural resources, industry, public enterprises</p> <p>ECS 461: TAXATION AND FISCAL POLICY (2 Units)</p>
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	<p>Partial equilibrium analysis of taxation, taxes on single industries. Partial equilibrium analysis: modelling the economic effect of tax policy. General equilibrium analysis of taxation, Optimal taxation and income distribution, Income taxation in Nigeria, Taxation of goods and service in Nigeria. Company taxation and wealth taxation in Nigeria. The structure of Nigerian taxation: federal, state and local. Fiscal policy with reference to stabilization, social services, economic development and poverty amelioration in Nigeria.</p> <p>ECS 481: COMMUNITY DEVELOPMENT (2 Units)</p> <p>The Approaches to community development, social theories of community development, methods in community, understanding diversity and inclusion, role of ethics community development, communication and leadership skills in community project</p> <p>ECS 400: RESEARCH PROJECT (6 Units)</p> <p>Each student is expected to select a project topic on a relevant problem approved by the Department. This offers to the student an opportunity to apply the newly obtained knowledge in research. Each student must also give a seminar on his/her project topic. Each project must be completed at the end of the academic session. The research project must meet the minimum academic standard prescribed by the Department. All 4/5 year programme students also submit an end of study project as a faculty requirement for the award of a Bachelor of Economics. It is generally a four or five – chapter work designed to begin to develop in the student, some practical research skills that would become useful to him/her during graduate studies.</p> <p>ECS 412: ADVANCED MACRO-ECONOMICS THEORY (4 Units)</p> <p>Economic growth of advanced capitalist economies. Business cycles in contemporary capitalism. Inflation and unemployment in advanced capitalism. Capital theory. Development in aggregate distribution theory. Economic model building. Expectations and post-Keynesian critique of equilibrium models. Marxian critique of contemporary capitalist economy. Critique of the application of macro-economic theories to developing countries, including the problems of globalization of economic life.</p> <p>ECS 442: NATIONAL ECONOMIC PLANNING (2 Units)</p> <p>Application of social accounting in Nigeria. History and rationale of economic planning. Plan scope and horizon. The organization of planning. The planning processes assessment of initial conditions, forecasting plan elaboration, implementation, monitoring, and project selection. Directive and indicative planning. Introduction to the planning problems involving industry, agriculture, foreign trade, investment, consumption, finance and technology. Difficulties of planning in developing countries. A review of planning experience in</p>
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	<p>Nigeria.</p> <p>ECS 410: PETROLEUM ECONOMICS (2 Units)</p> <p>Products of the petroleum industry. Industrial and other uses of the products of the industry. The strategic character of petroleum. World trade and investment in petroleum. The 'seven sisters' and the organization of the Petroleum Exporting Countries. The energy crisis. The ownership and economic roles of the petroleum industry in Nigeria.</p> <p>ECO 432 Applied Statistics II (2 Units)</p> <p>The course provides the opportunity to apply basic statistical techniques learnt in the analysis of data. Special focus will be on computations of measures of central tendency and variability, statistical application in tests of relationships, computations of basic geographical data, use of statistics in presentations.</p>
<p>12. Check-up of the consistency of the programme with the competences, the expected learning outcomes (overall consistency)</p>	<p>Competency is the capacity of a graduate to select and apply a combinations of learned skills, knowledge, ethics and perhaps attitude to carry out a define tasks.</p> <p>The subject matter of economics revolve certain core elements-economic theory, quantitative analysis and applied economics. It is expected that graduates will acquire sufficient skills to initiate and carry out applied economics analysis, developed knowledge adequate to tackle contemporary economic problems and good ethical and attitudinal culture.</p> <p>Expected outcomes</p> <ul style="list-style-type: none"> a) Knowledge: Describe the core areas of modern economics, recall economic principles and theory that promote economic growth and development. b) Comprehension: Classify the different economic systems that exist and predict their implications on business cycle c) Application: Apply the principles of zero budgeting on economic growth and development, as well as on small businesses. d) Analyses: compare and contrast different market structures and appraise their efficiency in resource allocation and distribution. e) Synthesis: Design, monitor, evaluate and implement a medium and small scale projects. f) Evaluation: Summarize the merits of economic policy in driving growth and evaluate advantages of zero budgeting process to public policy. <p>Implementation plan</p> <p>University of Calabar has a procedure for approval of new or revised programme as follows:</p> <p>The Department of Economics after deliberation and approval by the</p>



	<p>departmental board of studies, will forward the revised programme to the faculty board of studies and upon approval, the faculty of Social Sciences board of studies will forward it to the committee of Deans and after approval it will be presented to the university Senate for ratification/approval, Senate approval will give legal backing to the programme.</p> <p>Academic staff training strategy</p> <p>There will be regular training of academic staff, new strategy in line with Tuning Africa teaching methodology for the training of academic staff will be adopted.</p> <p>Invitation of experienced Tuning Experts to assist in the integration and fellowship and grants to enable staff acquire the required skills.</p> <p>Teaching, learning and assessment tools and strategy</p> <p>Lectures, seminars, group work, class interaction, reflection and assignment etc.</p> <p>Teaching and assessment of students will be tailored to specific competences and learning outcomes. The focus of the teaching methodology will be to help students develop knowledge rather than consumers of knowledge.</p> <p>Monitoring and quality assurance</p> <p>The University of Calabar has a quality assurance unit and this unit will ensure that competence based teaching planned for the revised programme is realized.</p>
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6.3 UNIVERSITE DE GOMA (UNIGOM), RDC.

I. NOM DU PROGRAMME

- **Licence en Sciences Economiques et de Gestion** (3 ans, soit 6 semestres).
- **Master en Economie Publique** (2 ans, soit 4 semestres).

II. PROFIL DU DIPLOME

1. Le programme de Licence proposé donne lieu à un diplôme de **Licence en Sciences Economiques et de Gestion**. Il s'agit d'un diplôme généraliste qui permet au détenteur de s'insérer déjà sur le marché d'emplois avec des compétences génériques et spécifiques comme l'illustre la première colonne des tableaux synoptiques. Le détenteur de ce diplôme sera en mesure d'exercer les métiers basiques en banque, d'assistant sur le marché financier, de conseiller commercial, d'assistant en planification de la production, gestion des stocks, gestion des ressources humaines, enseignants d'école secondaire et d'assistant-chercheur. Après la formation, le détenteur peut s'orienter dans n'importe quel master du domaine de l'économie, avec orientation professionnel ou recherche selon son choix.
2. Le programme de Master en Economie Publique proposé donne lieu à un diplôme de **Master Recherche en Economie Publique**. Il s'agit d'un diplôme spécifique qui permet au détenteur de s'insérer sur le marché d'emplois en qualité de haut cadre. Comme l'illustre les tableaux



synoptiques du programme, il complète les compétences génériques et spécifiques développées au niveau de la Licence tout en les approfondissant. Le détenteur de ce diplôme sera en mesure d'exercer les métiers de directeur de banque, d'analyste financiers, d'économiste, de planificateur, de statisticien, de conseiller en politiques publiques, d'assistant d'enseignement au supérieur, de chercheur junior, etc. Le détenteur de ce diplôme a la possibilité de poursuivre sa formation au cycle doctoral (PhD) dans n'importe quel domaine d'économie.

III. DUREE DU PROGRAMME

Le programme de **Licence en Sciences Economiques et de Gestion** a une durée de 3 ans. Les trois ans correspondent à six semestres, avec 30 crédits par semestre et 30 heures par crédit. Il donne lieu au diplôme de Licence/Bachelor.

Le programme **Master Recherche en Economie Publique** dure 2 ans scindées en quatre semestres. Chaque semestre vaut également 30 crédits avec 30 heures par crédit. Il donne lieu au diplôme de Master-Recherche.

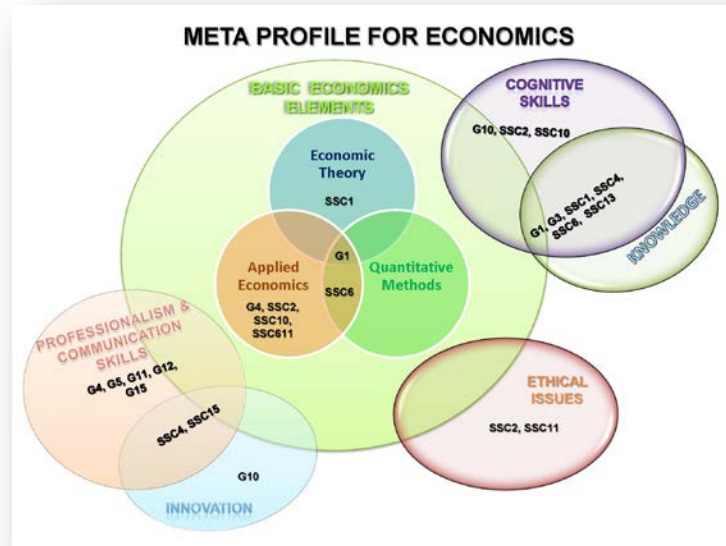
IV. DOMAINES D'EMPLOIS DES DIPLOMES

Le détenteur de la **Licence en Sciences Economiques et de Gestion** sera employé aux postes d'aide à la décision (assistant) dans les entreprises privées, dans les banques, dans les écoles secondaires, dans les centres de recherche, etc.

Le détenteur du **Master Recherche en Economie Publique** sera employé aux postes de décision (directeur) dans les entreprises privées, dans les banques, sociétés d'assurance, centres de recherche, universités, fonction publique, etc.

V. LIEN ENTRE LES COMPETENCES ET LE META-PROFIL

Les programmes sont adaptés au **méta-profile** ci-dessous élaboré par le groupe d'Economie durant les travaux du projet Tuning Africa II.



Le méta-profil regroupe de manière harmonieuse les compétences génériques (G) et spécifiques (SSC) suivantes :

COMPÉTENCES GÉNÉRIQUES À LA FORMATION UNIVERSITAIRE (ECONOMIE)

- G1** : Capacité à concevoir, analyser et synthétiser;
- G2** : Capacité à respecter les valeurs professionnelles et éthiques ainsi que le bien-être et la dignité de l'être humain (UBUNTU);
- G3** : Capacité à évaluer de façon critique et avoir une bonne conscience de soi ;
- G4** : Capacité à mettre en pratique ses connaissances ;
- G5** : Capacité à décider de façon objective et résoudre efficacement les problèmes ;
- G6** : Capacité à utiliser les technologies innovantes et appropriées ;
- G7** : Capacité à communiquer efficacement dans la langue officielle, nationale ou locale ;
- G8** : Capacité à apprendre et acquérir de nouvelles connaissances tout au long de la vie ;
- G9** : Capacité à être souple, à s'adapter, anticiper et réagir efficacement face à des situations nouvelles ;
- G10** : Capacité à réfléchir de façon créative et innovante ;
- G11** : Capacité à être leader, gérer et travailler en équipe ;
- G12** : Capacité à communiquer et avoir de bonnes relations interpersonnelles ;
- G13** : Capacité à comprendre et intégrer les enjeux économiques et environnementaux ;
- G14** : Capacité à travailler en contexte intra ou interculturelle et, le cas échéant, en contexte



international ;

G15 : Capacité à travailler de façon autonome ;

G16 : Capacité à examiner, évaluer et améliorer la qualité ;

G17 : Capacité à avoir confiance en soi et faire preuve d'esprit d'entreprise ;

G18 : Capacité à préserver et valoriser l'identité et l'héritage culturel africains.

SPECIFIC COMPETENCES OF ECONOMICS/ COMPÉTENCES SPÉCIFIQUES POUR LA DISCIPLINE D'ÉCONOMIE

SSC1 : Compréhension et application cohérentes des principes économiques.

SSC2 : Aptitude à appliquer les principes économiques dans la prise des décisions et choix rationnels: la consommation, la production et l'échange de biens et services.

SSC3 : Capacité de comprendre les opérations et l'interdépendance des marchés.

SSC4 : Capacité d'utiliser les technologies de l'information et de la communication (TIC) dans la transformation et la croissance économiques.

SSC5 : Aptitude d'effectuer des calculs économiques dans divers domaines de produits et services de fabrication.

SSC6 : Capacité d'analyser les données économiques pour formuler des décisions éclairées.

SSC7 : Capacité d'évaluer l'impact des politiques économiques sur les ressources humaines et naturelles.

SSC8 : Capacité de comprendre et d'évaluer l'impact des institutions sociales et économiques sur la gouvernance et le développement efficace.

SSC9 : Capacité d'identifier, analyser et résoudre les questions et les problèmes économiques africains et mondiaux.

SSC10 : Capacité de comprendre les politiques macro-économiques et d'en tirer des recommandations pour les décideurs.

SSC11 : Aptitude de comprendre et d'appliquer des politiques de développement durable et leur mise en œuvre.

SSC12 : Capacité de comprendre les opérations et régulation des marchés financiers.

SSC13 : Posséder des compétences à identifier, monter, gérer, suivre et évaluer les projets.

SSC14 : Pouvoir utiliser les outils économiques pour diagnostiquer les problèmes économiques.

SSC15 : Posséder des compétences innovantes, créatives, entrepreneuriales et de négociation.

SSC16 : Capacité à comprendre les opérations et la régulation des institutions bancaires et de microfinance.

SSC17 : Aptitude à comprendre le rôle, le fonctionnement et la régulation des institutions internationales et régionales.

Toutes les compétences, à la fois génériques et spécifiques, sont prises en compte dans différentes unités d'enseignement comme l'illustre les tableaux synoptiques.



VI. DEFINITION DES COMPETENCES

Les compétences du méta-profil ci-haut élaboré sont toutes prises en comptes dans les deux programmes. La définition des compétences est identique à celle de la méthodologie Tuning Academy.

VII. NIVEAU DE COMPETENCES

Sur l'échelle allant de 1 à 5, où 1 indique le niveau bas et 5 le niveau élevé d'acquérir la compétence, nous pouvons dire qu'au niveau de :

- Licence : le niveau d'acquisition et de maîtrise est en moyenne de 3 à 4.
- Master : le niveau d'acquisition et de maîtrise est en moyenne de 4 à 5.

VIII. RESULTATS D'APPRENTISSAGE VISES PAR LES COMPETENCES

Chaque unité d'enseignement permet à l'apprenant d'acquérir une ou plusieurs compétences génériques et spécifiques. Il s'agit principalement de :

- **Sciences Humaines et Sociales** : permet aux apprenants d'acquérir des compétences générales nécessaires à la compréhension des enseignements basiques d'économie.
- **Langues et actualité** : permet aux apprenants d'acquérir des compétences de communication dans les principales langues d'enseignement.
- **Economie** : permet aux apprenants d'acquérir des compétences basiques sur les principes de l'économie.
- **Gestion** : permet aux apprenants d'acquérir des compétences élémentaires sur la gestion des organisations.
- **Méthodes quantitatives** : permet aux apprenants d'acquérir des compétences basiques utiles à la quantification des phénomènes économiques.
- **Informatique** : permet aux apprenants d'acquérir des compétences basiques utiles à l'utilisation des NTIC dans l'appréhension des phénomènes économiques.
- **Economie publique** : permet aux apprenants d'acquérir des compétences spécifiques relatives aux politiques publiques dans les domaines variés.
- **Recherche et stage** : permet aux apprenants d'acquérir de confronter les connaissances acquises aux réalités du monde professionnel afin d'évaluer le niveau de maîtrise des compétences.

IX. METHODOLOGIE D'APPRENTISSAGE ET D'EVALUATION

Les principales méthodes d'enseignement sont :

- Magistrales : exposé magistral ;
- Participatives : travaux pratiques et dirigés, situation « problème-solution », stage et visite du milieu naturel ;
- L'usage des TIC dans l'interaction étudiant/enseignant.

Les techniques d'évaluation sont :

- Travaux pratique : 50%
- Interrogation à mi-parcours : 25%
- Travaux pratiques et dirigés : 25%



X. SPECIFICATION DES UNITES D'ENSEIGNEMENT ET COHERENCE AVEC LES COMPETENCES

CYCLE DE LICENCE

La formation s'organise autour des programmes qui se déclinent en Unités d'Enseignement dans lesquelles sont contenues les Unités de valeur. Pour suivre la formation au cycle Licence, le candidat devra pour le L1 justifier de l'obtention d'un diplôme d'Etat (Baccalauréat) ou de tout autre diplôme jugé équivalent par le Ministère de l'Enseignement Supérieur. L'accès au niveau supérieur (L2, L3) est subordonné par la validation de toutes les unités d'enseignement des niveaux inférieurs.

Ci-dessous, nous proposons les grilles d'enseignements détaillés avec identification des compétences génériques (CG) et spécifiques (CS)



Tableau 1 : Grille des enseignements L1

CS & CG	Intitulé UE	Code Eléments	Eléments constitutifs de l'UE	Volume Horaire des Matières					Nombre des crédits	Mode d'évaluation
				CM	TD	TP	TPE	Total		
SEMESTRE 1										
G6, SSC4	Informatique : 6 C	I01	Informatique I	90	30	30	30	180	6	ES+CC
G1, G2, G3, G4, G8, G10, G11, G1, G14, G18	Autres disciplinaires des Sciences Humaines et Sociales : 18C	SG02	Sociologie générale et Africaine	45	15	15	15	90	3	ES+CC
		PG03	Psychologie générale	45	15	15	15	90	3	ES+CC
		EC04	Education à la citoyenneté	45	15	15	15	90	3	ES+CC
		PL05	Philosophie et logique	45	15	15	15	90	3	ES+CC
		IR06	Initiation à la Recherche Scientifique	45	15	15	15	90	3	ES+CC
		GS07	Genre, Société et développement, VIH/ sida et Assainissement	45	15	15	15	90	3	ES+CC
G7, G12	Langues et actualité: 6C	HC08	Histoire du Congo et de l'Afrique	45	15	15	15	90	3	ES+CC
Total volume horaire				450	150	150	150	900	30	
SEMESTRE 2										
G5, G9, SSC1, SSC2	Economie : 6 C	EP10	Economie politique	90	30	30	30	180	6	ES+CC
SSC13	Gestion : 6 C	CG11	Comptabilité générale et documents commerciaux	90	30	30	30	180	6	ES+CC
G5, SSC6, SSC16	Méthodes quantitatives : 18 C	MG12	Mathématiques générales I	90	30	30	30	180	6	ES+CC
			Statistique descriptive	90	30	30	30	180	6	ES+CC
			Mathématiques financières	90	30	30	30	180	6	ES+CC
Total volume horaire				450	150	150	150	900	30	



Légende : CM : Cours Magistraux/ TD : Travaux Dirigés/ TP : Travaux Pratiques / TPE : Travail Personnel de l'Etudiant / UE : Unité d'enseignement / ES : Examen Semestriel / CC : Contrôle Continu / C : Crédit /G : Compétence Générique / SSC : Compétence Spécifiques.

Tableau 2 : Grille des enseignements L2

CS & CG	Intitulé UE	Code Eléments	Eléments constitutifs de l'UE	Volume Horaire des Matières					Nombre des crédits	Mode d'évaluation
				CM	TD	TP	TPE	Total		
SEMESTRE 3										
G6, SSC4	Informatique : 5 C	I01	Informatique II	75	25	25	25	150	5	ES+CC
G1, G8	Autres disciplinaires des Sciences Humaines et Sociales : 9C	DC02	Droit Commercial	45	15	15	15	90	3	ES+CC
		MR03	Méthode de Recherche en Sciences Sociales	45	15	15	15	90	3	ES+CC
		D04	Démographie	45	15	15	15	90	3	ES+CC
G5, SSC5, SSC6	Méthodes quantitatives : 10	MG05	Mathématique Générale II	75	25	25	25	150	5	ES+CC
		SM06	Statistique mathématique	75	25	25	25	150	5	ES+CC
G7 ; G12, G18	Langues et actualité : 6C	HCA07	Histoire du Congo et de l'Afrique I	45	15	15	15	90	3	ES+CC
		A08	Anglais II	45	15	15	15	90	3	ES+CC
Total volume horaire				450	150	150	150	900	30	
SEMESTRE 4										
G4, G5, G9, G13, SSC1, SSC2, SSC5	Economie : 16 C	M09	Microéconomie	75	25	25	25	150	5	ES+CC
		M10	Macroéconomie	75	25	25	25	150	5	ES+CC
		ET11	Economie des Transports et géographie économique	45	15	15	15	90	3	ES+CC
		EP12	Economie des pays en Développement	45	15	15	15	90	3	ES+CC



G3, G5, G10, G16, SSC13	Gestion : 14 C	CS13	Comptabilité des sociétés	60	20	20	20	120	4	ES+CC
		TM14	Théorie générale de Management	45	15	15	15	90	3	ES+CC
		GP15	Gestion de la production	45	15	15	15	90	3	ES+CC
		CA16	Comptabilité Analytique et Budgétaire	60	20	20	20	120	4	ES+CC
Total volume horaire				450	150	150	150	900	30	
Légende : CM : Cours Magistraux/ TD : Travaux Dirigés/ TP : Travaux Pratiques / TPE : Travail Personnel de l'Etudiant / UE : Unité d'enseignement / ES : Examen Semestriel / CC : Contrôle Continu / C : Crédit / G : Compétence Générique / SSC : Compétence Spécifiques.										

Tableau 3 : Grille des enseignements L3

CS & CG	Intitulé UE	Code Eléments	Eléments constitutifs de l'UE	Volume Horaire des Matières					Nombre des crédits	Mode d'évaluation
				CM	TD	TP	TPE	Total		
SEMESTRE 5										
G5, SSC1, SSC2	Economie : 12 C	FP01	Finances publiques	45	15	15	15	90	3	ES+CC
		CN02	Comptabilité Nationale	45	15	15	15	90	3	ES+CC
		EM03	Economie monétaire	45	15	15	15	90	3	ES+CC
		ER04	Economie rurale générale	45	15	15	15	90	3	ES+CC
G1, G5, G8, G12, G14,G16, G17, SSC9, SSC15	Gestion : 12 C	EP05	Entrepreneuriat et PME	45	15	15	15	90	3	ES+CC
		AF06	Analyse Financière	45	15	15	15	90	3	ES+CC
		GR07	Gestion des ressources humaines	45	15	15	15	90	3	ES+CC
		GM08	Gestion Marketing	45	15	15	15	90	3	ES+CC
G6, SSC4	Informatique : 3 C	I09	Informatique III	45	15	15	15	90	3	ES+CC
G7, G12	Langues : 3 C	A10	Anglais III	45	15	15	15	90	3	ES+CC



Total volume horaire				450	150	150	150	900	30	
SEMESTRE 6										
G3, G13, SSC9, SSC11	Autres disciplinaires des Sciences Humaines et Sociales : 9C	NE11	Nature de l'Etat et Système socio-économique	45	15	15	15	90	3	ES+CC
		PE12	Population, Environnement et développement	45	15	15	15	90	3	ES+CC
		HE13	Histoire économique	45	15	15	15	90	3	ES+CC
G5, G9, G10, SSC5, SSC6	Méthodes quantitatives : 6 C	MQ14	Méthodes quantitatives d'économie	45	15	15	15	90	3	ES+CC
		E15	Econométrie	45	15	15	15	90	3	ES+CC
G4, G15	Recherche et Stage : 15 C	SL16	Stage de licence				150	150	5	CC
		ML17	Mémoire de licence				300	300	10	CC
Total volume horaire				225	75	75	525	900	30	
Légende : CM : Cours Magistraux/ TD : Travaux Dirigés/ TP : Travaux Pratiques / TPE : Travail Personnel de l'Etudiant / UE : Unité d'enseignement / ES : Examen Semestriel / CC : Contrôle Continu / C : Crédit /G : Compétence Générique / SSC : Compétence Spécifiques.										



CYCLE DE MASTER : SCIENCES ECONOMIQUES/ ECONOMIE PUBLIQUE

Pour accéder au cycle de Master, l'étudiant doit être titulaire d'une Licence en ce qui concerne le Master 1 et d'un Master 1 pour l'accès en Master 2. Tout autre diplôme jugé équivalent est accepté. Ci-dessous, nous présentons les grilles d'enseignements détaillés avec identification des compétences génériques (CG) et spécifiques (CS).



Tableau 4 : Grille des enseignements M1

CS & CG	Intitulé UE	Code Eléments	Eléments constitutifs de l'UE	Volume Horaire des Matières					Nombre des crédits	Mode d'évaluation
				CM	TD	TP	TPE	Total		
SEMESTRE 1										
G1,G8,G9, G13,G14, SSC7, SC8, SSC9, SC10, SSC11, SC12, SC13, SSC14, SSC15, SSC16, SSC17	Economie : 24 C	MA01	Microéconomie approfondie	60	20	20	20	120	4	ES+CC
		MA02	Macroéconomie approfondie	60	20	20	20	120	4	ES+CC
		ED03	Economie du Développement et Planification du développement économique	60	20	20	20	120	4	ES+CC
		FC04	Fluctuations et Croissance économique	45	15	15	15	90	3	ES+CC
		TC05	Théorie de la croissance	45	15	15	15	90	3	ES+CC
		TE06	Théorie de l'Echange International	45	15	15	15	90	3	ES+CC
		TD07	Théorie et doctrines économiques et sociales	45	15	15	15	90	3	ES+CC
G17, SSC9	Autres disciplinaires des Sciences Humaines et Sociales : 6 C	DF08	Droit fiscal	45	15	15	15	90	3	ES+CC
		TA09	Théorie de l'Administration publique	45	15	15	15	90	3	ES+CC
Total volume horaire				450	150	150	150	900	30	
SEMESTRE 2										
SSC4	Informatique : 3 C	I10	Informatique IV	45	15	15	15	90	3	ES+CC
G4,G13G 16, SSC1, SSC2, SSC8	Economie Publique : 12 C	CE11	Economie publique	45	15	15	15	90	3	ES+CC
		EE12	Economie de l'éducation	45	15	15	15	90	3	ES+CC
		ES13	Economie de la Santé	45	15	15	15	90	3	ES+CC
		SE14	Séminaire d'économie publique	45	15	15	15	90	3	ES+CC



G1, G9, G10,SSC 5, SSC6	Méthodes quantitatives : 12 C	RO15	Recherche Opérationnelle	60	20	20	20	120	4	ES+CC
		TP16	Théorie et Pratiques de Sondages	60	20	20	20	120	4	ES+CC
		E17	Econométrie	60	20	20	20	120	4	ES+CC
G6, G12	Langues: 3C	A18	Anglais IV	45	15	15	15	90	3	ES+CC
Total volume horaire				450	150	150	150	900	30	
Légende : CM : Cours Magistraux/ TD : Travaux Dirigés/ TP : Travaux Pratiques / TPE : Travail Personnel de l'Etudiant / UE : Unité d'enseignement / ES : Examen Semestriel / CC : Contrôle Continu / C : Crédit /G : Compétence Générique / SSC : Compétence Spécifiques.										

Tableau 5 : Grille des enseignements M2

CS & CG	Intitulé UE	Code Eléments	Eléments constitutifs de l'UE	Volume Horaire des Matières					Nombre des crédits	Mode d'évaluation
				CM	TD	TP	TPE	Total		
SEMESTRE 3										
G10,G13, G14, SSC7, SSC8, SSC9, SSC10	Economie : 13 C	AS01	Analyse des systèmes et des structures économiques	60	20	20	20	120	4	ES+CC
		QS02	Question spéciales d'économie internationale	45	15	15	15	90	3	ES+CC
		PE03	Politique économique	45	15	15	15	90	3	ES+CC
		ET04	Economie du Travail	45	15	15	15	90	3	ES+CC
G2,G11,G 13,G14,G 17, SSC11, SSC13	Autres disciplinaires des Sciences Humaines et Sociales : 11 C	ED05	Ethique et déontologie professionnelle	30	10	10	10	60	2	ES+CC
		QE06	Questions des entreprises publiques	45	15	15	15	90	3	ES+CC
		CP07	Comptabilité publique	45	15	15	15	90	3	ES+CC
		GE08	Gestion des espaces urbains dans les PVD	45	15	15	15	90	3	ES+CC
G7, G12	Langues : 3 C	A09	Anglais V	45	15	15	15	90	3	ES+CC
G6, SSC4	Informatique : 3 C	I10	Informatique V	45	15	15	15	90	3	ES+CC



Total volume horaire				450	150	150	150	900	30	
SEMESTRE 4										
G4,G11, SSC12, SSC16	Economie publique : 8 C	AA11	Analyse approfondie des Finances publiques	75	25	25	25	150	5	ES+CC
		SE12	Séminaire d'économie publique 2	45	15	15	15	90	3	ES+CC
G4,G15, SSC14	Recherche et stage : 22 C	SL13	Stage de licence				210	210	7	CC
		ML14	Mémoire de licence				450	450	15	CC
Total volume horaire				120	40	40	700	900	30	
Légende : CM : Cours Magistraux/ TD : Travaux Dirigés/ TP : Travaux Pratiques / TPE : Travail Personnel de l'Etudiant / UE : Unité d'enseignement / ES : Examen Semestriel / CC : Contrôle Continu / C : Crédit /G : Compétence Générique / SSC : Compétence Spécifiques.										



6.1 Staff development needs

There are various staff development in the SAG group. These include among others training of staff to acquire higher degrees in Economics, workshop and conference. Table 6.4 summarizes the specific needs of the economics group.

Table 6.4: Map of strength and needs of staff development at SAG level.

Name of SAG	Staff development already available.	Strengths	Needs
Economics	Various Universities at the SAG currently provide sponsorship to selected staff to attend conferences, obtain higher degrees in domestic country and abroad.	Teaching and Assessment: the online teaching classes has also build capacity in the various taxonomy and developing Intended learning outcomes and also the methodology of assessment to achieve the various ILOs	Workshop on Tuning teaching methodology, assessment and learning. The various taxonomy, linking and aligning teaching, learning and assesment to achieve the various ILOs.

6.2: Relevance of the continental credit system

As encapsulated in the UNESCO World Declaration on Higher Education for the twenty-first century: Vision and Action (October 1998), a homogenous credit system in economics across Africa would facilitate the harmonization of Economics discipline, mutual recognition of academic and professional qualification as well as intra-Africa mobility and integration in the continent. This harmonization of credit is impeded by the lack of a homogenous credit system, reliable means to measure and transfer knowledge already acquired, this constraints the transfer of credit from one university to another across different regions in Africa.

Conclusion

The economics group considered the student centred teaching methodology, which aim at achieving predetermined competences, adopted by Tuning Africa initiative appropriate to reform higher education in Africa. The elements of this approach which add credence to it is the development of intended learning outcomes, alignment of teaching, learning and assessment. These tools with the combined approach of generic and subject specific competences to assess meta-profiles of economics programme enhances the quality of teaching and learning.

The group acknowledges the importance of harmonized credit system in Africa and the need to create strong advocacy and institutional infrastructural support as well as enlisting more staff in the on-line course in participating institutions as pilot scheme. The novelty of Tuning Africa methodology is encapsulated in the survey results which led to the meta-profile. In this regard, the economics group submit that the definition of meta-profile, generic and subject specific competencies discussed in this report, notably constitute the basis for evaluating the extent economics curriculum in African universities equips graduates with the necessary competences.





A strategic initiative should be developed where Higher Education Councils/National Universities Commission or equivalent bodies, Vice-Chancellors, Deans, specific national economic societies (professional associations), student organizations and other key stakeholders are enlisted to champion and disseminate/implement Tuning approach in African universities.

This initiative is implemented on behalf of the European and African Union Commissions by:





4. WORKING DOCUMENTS

4.1 ENGLISH VERSION



FOR ENDORSEMENT

Prepared on Behalf of the

**African Union Commission and European Commission
within the Framework of Tuning Africa-II Project Implemented by the Tuning Academy**

This initiative is implemented on behalf of the European and African Union Commissions by:





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I—Background

The vision of African Union, to build an integrated continent, requires a harmonised education system, where intra-Africa mobility and skills portability are key elements in its realization. Harmonized education and training systems are essential for effective implementation of the Continental Education Strategy for Africa (CESA) and Agenda 2063. Harmonisation is an instrument for enabling African higher education to contribute to and be aligned with the African vision of integration. The African Union Commission therefore developed a framework for harmonisation of higher education in Africa to facilitate the mutual recognition of academic qualifications.

There are increasing efforts “in Africa toward “harmonisation of higher education” since the diverse systems of higher education have resulted in the lack of recognition of university degrees constraining academic integration and the mobility of students across the continent. The implementation of the Harmonisation Strategy involves, among others, designing common curriculum development frameworks to enable comparability and equivalence of learning outcomes in African universities.

Within the framework of the AU Strategy for Harmonisation of Higher Education a project—on harmonisation of curriculum development in African universities using the “Tuning” methodology—was launched in collaboration with the European Commission. One of the activities in the initiative is the drafting of a Proposal for a Credit System for Africa to further advance student mobility and contribute to harmonization process.

It is imperative to develop a common measure of student workload in terms of credit hours so that it is possible to harmonize the range of credits and compare programmes in different countries. A vital instrument to facilitate comparability of qualifications is the development of an agreed credit transfer system. Study programmes and periods of learning will be more comparable and compatible by making use of credit transfer system. A common credit transfer system that can be recognized and transferred at national, regional, and continental levels is paramount in advancing the harmonization of the higher education systems in Africa.

II—Introduction

In the last decade, higher education has witnessed unprecedented growth globally. Africa stands as one of the regions which has entertained massive expansion and development—with all indications that this will continue unabated in light of the anticipated youth bulge in the continent for several decades.

This phenomenon is taking place at an opportune time when key development players, policy makers, and relevant organisations—from the African Union (AU) to the African Development Bank (AfDB), from the World Bank to the Organisation for Economic Cooperation and Development (OECD), and from the Association of African Universities (AAU) to the Association for the Development of Education in Africa (ADEA)—all concur that higher education must be centrally placed in the strategic development plan of African nations for a meaningful and sustainable economic development to take effect (Teferra, 2014). Higher education is now undisputedly established as “core” (AU, 2006), “critical” (OECD, 2010), “central” (AfDB, 2008), “key” (European Commission, 2014), and “unambiguous” (World Bank,



2008) to national development and global competitiveness thereby enormously catapulting its role.

As succinctly articulated in CESA 2016-25, virtually all development players now concur that for any meaningful and sustainable economic growth to be realized and sustained, tertiary education must be centrally placed in the development agenda of nations. Building a tertiary education system is no more a luxury African countries were once chastised for indulging in it; but a critical imperative for national development and global competitiveness (AUC, 2016).

STISA-2024 (AUC, 2014), another parallel strategy of the African Union Commission, affirms that higher education provides a conducive environment for the development and full exploitation of the potential of science, technology and innovation to promote sustainable growth and socio-economic development. It further underscores its capacity to improve global competitiveness to research, innovation and entrepreneurship that entail quality knowledge production in African universities.

Agenda 2063 (AU, 2014), the blueprint for Africa's development agenda unequivocally state the need to,

Build and expand an African knowledge society through transformation and investments in universities, science, technology, research and innovation; and through the harmonization of education standards and mutual recognition of academic and professional [sic] qualifications.

In the current era of the knowledge economy, the key role of higher education could be expressed in a number of ways. Higher education enables graduates to effectively use new technologies—and develop new tools and skills as well as promote job creation and entrepreneurship. By producing well-trained teachers, it can enhance the quality of primary and secondary education systems; by training physicians and other health workers, it can improve a society's health thereby, raising productivity at work; by nurturing governance and leadership skills, it can provide countries with the talented individuals needed to establish a policy environment favourable to socio-economic growth. Setting up robust and fair legal and political institutions, making them part of a country's fabric, and developing a culture that encourages the creation of new businesses and jobs, for example, call for advanced knowledge and decision-making skills. Addressing environmental problems and improving security against internal and external threats also place a premium on the skills that advanced education is best positioned to deliver (Bloom, Canning, Chan, & Luca, 2013).

African higher education has recorded unparalleled expansion in the last decade with enormous implications for the sector in particular and social and economic development of the region as a whole. This unprecedented development, needless to say, carries a solid promise in situating Africa as a significant, even critical player, in the global knowledge society if expansion is concurrently augmented with quality—a key issue Africa is grappling with to address it at multiple fronts.

In undertaking its Agenda 2063 and the Continental Education Strategy for Africa 2016-25, the African Union Commission, in cooperation with a number of bilateral and multi-lateral players has initiated several endeavors to promote quality higher education in the continent. Among others, the Commission closely works with European Union Commission, its counterpart, among others in harmonizing the higher education systems in Africa.



The harmonization of higher education in Africa is a multidimensional process that promotes the integration of the higher education space in the region. This objective is to achieve collaboration across borders, sub-regionally and regionally, in curriculum development, educational standards and quality assurance, joint structural convergence, consistency of systems as well as compatibility, recognition and transferability of degrees to facilitate mobility. The African Union Commission promotes the harmonization of African higher education to integrate the region. The European Commission supports these efforts through the Africa-EU Strategic Partnership including the Africa-EU Migration, Mobility and Employment Partnership and the Joint Africa-EU Strategy Action Plan. Various initiatives to foster harmonization have been launched in the last three decades (Teferra and Hahn, 2012).

One such initiative to harmonize the continent's higher education system is a Tuning Africa Project which has been running for over half-a-decade now. The Project, now in its second phase, is undertaking to propose a common credit system for the continent, as one of the key endeavors in advancing the harmonization of the higher education systems in Africa. This effort comes on the heels of existing and emerging similar continental and sub-continental efforts as pursued by Association of African Universities, Conseil Africain et Conseil Africain et Malgache pour l'Enseignement Supérieur (African and Malagasy Council on Higher Education (CAMES), Inter-University Council for East Africa (IUCEA), and the key initiative the Addis Ababa Convention (further elaborated later), among others. This current effort intends to draw from these experiences in building the continental wide credit system.

III—What is Tuning?

Tuning higher education started in 2000 in Europe as a project to link the political objectives of the Bologna Process strategically and at a later stage the Lisbon Strategy to the higher education sector. Overtime, Tuning has developed into a process and an approach to (re-) design, develop, implement, evaluate and enhance quality for degree programmes and has expanded around the world.

Tuning is a methodology to improve teaching, learning and assessment in higher education reform. It guides the development of curriculum, a credit accumulation mechanism, and transfer system so as to obtain intended learning outcomes, skills and competences. One of its objectives is to ensure consensus of academics across borders on a set of reference points for generic and subject-specific competences alongside subject lines (Teferra and Hahn, 2012).

The name Tuning was considered to reflect the idea that universities do not and should not look for uniformity in their degree programmes or any sort of unified, prescriptive or definitive European curricula but simply look for points of reference, convergence and common understanding. The protection of the rich diversity of European education has been paramount in Tuning and in no way seeks to restrict the independence of academic and subject specialists, or undermine local or national authorities.

Whereas educational systems are primarily the responsibility of governments, educational structures and content remain within the purview of higher education institutions and their academic staff. Tuning focuses not on educational systems, but on educational structures with emphasis on the subject area level, that is the content of studies.





As a result of the Bologna Process, the educational systems in all European countries have been vigorously reforming and harmonizing. This is the direct effect of the political decision to converge the different national systems in Europe with requisite academic and professional profiles reflecting and anticipating the needs of society. For higher education institutions, these reforms have been instrumental for initiating intensive dialogue including the comparability of curricula in terms of structures, programmes and actual teaching, as well as credit systems. For more information please visit <http://www.tuningacademy.org>.

IV—Credit System: The Concept

The concept of credit system appeared in the United States at the end of the 19th century. In 1872, Harvard University replaced the system of the classical fixed curriculum with an increasingly wide choice of courses for students. Starting with electives only for senior students by 1884, the university offered almost complete freedom of choice to all students and shifted in the 1890s to measuring progress towards a degree on the basis of the accumulation of individual courses rather than completing a total course of study. Other universities and colleges quickly followed the Harvard model. The credit system thus emerged as a result of electives.

Towards the end of the 19th century and into the early 20th century, it became increasingly common for colleges and universities to list the number of credits offered for each course in their catalogues; the number being determined by the hours of classroom and laboratory work devoted to the course per week. Degree requirements were stated in terms of numbers of required credits as well as in course distribution. Also in the early 1900s, the credit system extended beyond undergraduate study to include postgraduate programmes.

The system in the United States remains to be based on a fixed number of teaching hours per unit which, in principle, doesn't cover thesis or work placements, among others. It is based on a teacher-driven concept used to organize the loads of a teacher. College students generally receive credit hours based on the number of "contact hours" per week in class, for one term. Credit system was not designed for covering contemporary educational discourses and pedagogical approaches such as experiential learning, problem based learning, and so on. Though critiqued for being rigid, this system continues to be used in North America and also in large parts of Asia.

Nowadays, the definition of credits in higher education systems may be based on different parameters, such as contact hours, student workload and learning outcomes.

V—Workload: The Concept and the Trend

The workload based system was initiated in Northern part of Europe in the second half of the 1970s. It further became popular with the emergence of theories such as student-centered learning, active learning, participatory learning, and experiential learning, on the accounts of theorists such as John Dewey, Jean Piaget, Carl Rogers, and Lev Vygotsky. This system takes into account hours of not simply classroom activities, laboratories, workshops, and internships, among others, but also time spent for independent and group studies associated with these activities.

At the end of the 1980s, and at the birth of the Erasmus programme, the European Credit Transfer and Accumulation System (ECTS) initiative was introduced to facilitate the mobility of students and recognition of their credentials. It is a student-centred system based on



the student workload required to achieve the objectives of a programme of study. A workload is a key element of the learning-outcomes based educational system.

ECTS was taken on board by the Bologna Process in 1999 (and included in the Bologna declaration) and it became the cornerstone of the student centred/ active learning approach. It is now the formal system of 48 signatory countries¹ of the Bologna Process, including the European Union and Russia. Recently, it was introduced to the Central Asian Countries. In Latin America the same approach was introduced to improve quality on the design and delivery of degree programmes. The Latin American Reference Credit (CLAR) system is a result of internal discussions and decisions of the region's 18 Ministries of Higher Education which have adapted the system to their needs.

Thus, this approach seems to be part of an emerging global trend. In Asian region, a comparative initiative has been taken for mobility and credit transfer purposes. China has also expressed interest to develop a workload based/learning based system. For more comparative perspectives on this and credit system later.

In Africa, the Tuning Methodology has been employed to contribute to the key features of the African Higher Education Harmonization Strategy, following the launch of the Tuning Africa Project in 2010 as an African Union and European Union partnership initiative. This project, which is in its second phase now, has several layers of bodies with clearly identified roles.

The Tuning Africa Policy Advisory Group (TAPAG)—a collective of national, subregional and continental bodies involved in higher education and established by Tuning Africa Project II—is one of them. As part of its remit, TAPAG extensively interrogated the two concepts, i.e., credit and workload, at its last meeting in November 2016 in Accra, Ghana.

TAPAG defined credit as a measure of workload required for a typical learner to achieve the objectives of a programme, specified in terms of the predetermined learning outcomes and competences that is expected to be acquired. A credit thus measures student workload required to achieve expected learning outcomes.

Workload, according to TAPAG, is an estimated account of the learning activities such as lectures, seminars, projects, practical activities, work placements, individual studies all measured in time, which a learner typically needs to achieve the defined learning outcomes.

These two definitions might be the pillars of an African Credit System.

¹ 48 Signatories of the Bologna Accord of the European Higher Education Area include Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, and Vatican City.



VI—The Rationale for a Credit System

The importance of a common credit system for internationalization of higher education was understood early in the 1990s, as for example reflected in the UNESCO World Declaration on Higher Education for the Twenty-First Century: Vision and Action (October 1998²). A common credit system is key for harmonizing different higher education systems—characteristic of the African continent—and central to the African Union’s Agenda 2063 which explicitly states the critical need for harmonization of education standards and mutual recognition of academic and professional qualifications in the continent. This was further pronounced in CESA 2016-25 which affirms that “Harmonized education and training systems are essential for the realization of intra-Africa mobility and academic integration through regional cooperation”.

A credit system is a key instrument for the accumulation and transfer of knowledge, skills and (wider) competences expressed and measured in terms of student workload and learning outcomes. The objectives and importance of a credit system in the higher education sector are intended to

- i. Promote student mobility
- ii. Improve the comparability and compatibility of study programmes
- iii. Render more transparency to study programmes
- iv. Provide more flexibility and diversity of pathways
- v. Facilitate easier development of well-balanced programmes
- vi. Promote feasibility of programmes
- vii. Enhance quality of programmes
- viii. Advance recognition of (periods of) studies taken elsewhere successfully
- ix. Facilitate different types of learning such as informal, non-formal, formal, part-time, among others.
- x. Facilitate more substantive collaboration among different higher learning and research institutions towards a common higher education space.

For continents and sub-continents with a desire to harmonize their higher education systems and those with interest in articulating and building a common area of higher education, developing a common credit transfer system continues to be of utmost importance. The next section provides a global perspective of different credit systems, including trends in Africa (a dedicated section at the bottom), to help draw experience in the interest of building a robust one for the continent.

VII—Global Perspectives

1. United States³

Two major credit systems exist in the United States, including a few local ones in certain higher education institutions. The two major credit systems are the semester-hours of credit and the quarter hours of credit as illustrated in Table 1.

² http://www.unesco.org/education/educprog/wche/declaration_eng.htm#world%20declaration

³ Ulicna, Daniela (2011) Study on the use of credit systems in higher education cooperation between the EU and the US.
http://ec.europa.eu/dgs/education_culture/repository/education/library/study/2011/us_en.pdf



The “semester hours of credit” system is the most commonly used in the United States. Overall, the US credit systems are rather tightly related to the education and training programmes and instruction hours. In the US, the credit system is based on how the inputs are organized; and thus the weight of credit points is based wholly on the inputs.

Table 1: Credit System in the United States

Name	Terms per academic year	Duration in weeks	Total credits for the period	Total credits per academic year (undergraduate level)	Total credits for a bachelors degree
Semester hours of credit	2 semesters	15	15	30 (15 credits x 2 semesters)	120 (15 credits x 8 semesters)
		16	16	32 (16 credits x 2 semesters)	128 (16 credits x 8 semesters)
Quarter hours of credit	3 quarters	10	15	45 (15 credits x 3 quarters)	180 (15 credits x 12 quarters)
		11	16	48 (16 credits x 3 quarters)	192 (16 credits x 12 quarters)

2. Europe

European Credit Transfer System (ECTS)⁴ is a learner-centred system for credit accumulation and transfer, based on the principle of transparency of the learning, teaching and assessment processes. Its objective is to facilitate the planning, delivery and evaluation of study programmes and student mobility by recognising learning achievements and qualifications and periods of learning.

ECTS was first developed as an instrument to support credit transfer between higher education institutions in the framework of student mobility organised under the Erasmus programme. At that time, it was predominantly based on teaching inputs. It has progressively evolved into a system used for both credit accumulation and credit transfer in the framework of transnational mobility but also for mobility within a country or within a single institution.

The main goal behind the development of ECTS was to enable the recognition of studies abroad. When ECTS was first introduced in Europe in the 1980s, the procedures for recognition of foreign studies were rather rigid and based on a detailed comparison of curricula. Furthermore, it was quite common that higher education systems were based on the use of contact hours, however these lacked a good account of the work a student was expected to do during his/her studies. The work that students were expected to do autonomously through independent studies, project work, or periods of practical training were not accounted for. Another reason why a system based only on contact hours was considered inappropriate was the diversity of higher education structures, approaches and traditions across Europe. Higher education institutions in Europe combine different learning activities to develop programmes,

⁴ ECTS’s User Guide 2015

http://ec.europa.eu/dgs/education_culture/repository/education/library/publications/2015/ects-users-guide_en.pdf



but the proportion of classroom teaching, practical work, autonomous work, project work, and so on, varies greatly.

While different learning activities can lead to similar outcomes in terms of students' knowledge and competences, some are more intensive in contact hours than others. Consequently, it was considered that a system based on contact hours would not give a sufficient account of the equivalence between courses, even though the expected learning outcomes were equivalent. As a result, ECTS was progressively redefined to strengthen the core role of two main concepts:

- i. The concept of learning outcomes: the award of credit signals that the learner has achieved the expected learning outcomes independent of the inputs that s/he has been through;
- ii. The concept of workload which embraces all learning activities that a person is typically expected to complete in order to achieve the expected learning outcomes.

Each programme component (unit, module, course, etc.) is defined in terms of learning outcomes which set out what a learner is expected to know, understand and be able to do upon the completion of the programme component. Based on the definition of the learning outcomes, the higher education staff identifies the typical student workload needed to achieve these learning outcomes. Calculation of student workload covers all learning activities including the teaching hours, independent work, practical assignments, among others. In ECTS, 60 credits are allocated to a full time year of formal learning. One credit is typically between 25 and 30 hours of workload.

The major conceptual or structural differences between the use of credit in the US and ECTS in EU are:

- i. The use of learning outcomes to describe and define the content of programme components when using ECTS, while in the US components are generally described through curricula/teaching inputs;
- ii. The use of contact hours as a basis for calculating credit value in the US while in ECTS student workload covering a full range of learning activities is expected to be used; and
- iii. Standardised approach to describing the level of programmes' components/courses in the US, while in Europe there is no common approach to describe the level of courses other than designating them as either Bachelors or Masters.

3. United Kingdom⁵

Credit Accumulation and Transfer Scheme (CATS) is used by many universities in the United Kingdom to monitor, record and reward passage through a modular degree course and to facilitate movement between courses and institutions. One credit is equivalent to 10 notional hours of study (contact time and allocation for self-study). For example, a university course of

⁵ Souto-Otero, Manuel (2013) Review of credit accumulation and transfer policy and practice in UK higher education, University of Bath.
https://www.heacademy.ac.uk/system/files/resources/review_of_transfer_of_credit_report.pdf



150 estimated study hours would be worth 15 credits, and a university course of 300 estimated study hours would be worth 30 credits. A full academic year is worth 120 credits.

CATS schemes use in the UK include CATS (England & Northern Ireland), SCOTCAT (Scotland), the Credit and Qualifications Framework for Wales (Wales), the Learning and Skills Development Agency credit framework and Open College Network credits. There is an official equivalence with ECTS: two UK credits equal to one ECTS credit. Thus, in the UK 120 credits constitute one academic year while it is 60 for ECTS.

4. Latin American⁶ Reference Credit (CLAR)⁷

The Latin American Reference Credit (CLAR) has been devised as a unit of value for calculating a workload, measured in hours, required to be carried by a student in order to attain learning outcomes and pass a subject or teaching period.

From a complementary standpoint, CLAR represents a system that displays the relative complexity of the different curricular components and facilitates the assessment and comparison of learning results within different contexts of qualifications, degree programmes and learning environments. It provides a shared method for the purpose of comparing learning between the different degree programmes, sectors, regions and countries.

CLAR recognizes an annual full-time student workload to be equivalent to 60 credits. Use of this normalizer was approved at Tuning Latin America Project in 2011, taking into account:

- i. its divisibility, which enables it to be easily adapted to diverse ways of structuring the academic year (six, four and three-month periods and modules);
- ii. its wide use in other parts of the world, which would thus facilitate its understanding and compatibility.

If as a general rule, one (academic) year of full-time study is equivalent to 60 credits, then one semester will be equivalent to 30 credits. Thus, in accordance with existing degree courses and programmes in different countries, a four-year, five-year and seven-year programmes would be equivalent to 240, 300, and 420 credits respectively. The workload assigned to a CLAR credit is defined by a record of the total amount of time a student sets aside to learning on an annual basis—and thus has no single value.

5. Asia (ASEAN)⁸

Credit transfer systems designed to be used specifically among universities in Association of South East Asian Nations (ASEAN) member states is a fairly recent phenomenon. Traditionally, recognition of periods of studies abroad involving the ASEAN region has been carried out on case-by-case basis. Although no global credit transfer system for the ASEAN region currently exists, certain systems are used to help streamline the process.

⁶ 18 Latin American countries involved in CLAR include Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, México, Nicaragua, Panamá, Paraguay, Perú, Uruguay and Venezuela.

⁷ CLAR (2013)

⁸ Mapping student mobility and Credit Transfer Systems in ASEAN region (2016).



Three major credit transfer systems are in use in the region: the AUN ASEAN Credit Transfer System (AUN-ACTS), the University Mobility in Asia and the Pacific Credit Transfer Scheme (UMAP-UCTS), and the SEAMEO-RIHED Academic Credit Transfer Framework (AIMS). Of these the AUN-ACTS is the only credit system exclusive to intra-ASEAN mobility. These systems have been created to meet a variety of interests and motivations.

Table 2: Comparisons between Different Credit Systems in Asia

	AIMS	UCTS	ACTS
Countries involved	UCTS participating countries	Australia, Brunei, Cambodia, Fiji, Guam, Hong Kong, Indonesia, Japan, Republic of Korea, Laos, Macau, Malaysia, Mongolia, Myanmar, New Zealand, Papua New Guinea, Philippines, Samoa, Singapore, Taiwan, Thailand, Timor-Leste, Vietnam	ASEAN + partners: Brunei Darussalam, Cambodia, Indonesia, Japan, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam
Credit definition	1 academic year = 30 to 35 credits	1 academic year = 60 credits	1 academic year = 60 credits
Student workload per year	1800–2100 hours	1800 hours	1500–1800 hours
Student workload per credit	38–48 hours (includes 13–16 academic hours of instruction)	30 hours of work	25–30 hours of student workload

6. Russia⁹

The introduction of “credit units”, зачетный единиц / *zachetnaja edinitisa* in Russian, is a result of Russia’s participation in the Bologna process, which requires the use of credits that are compatible with ECTS. The development of a credit system in Russian higher education was first approved in 2002. The new credit unit is defined as representing 36 academic hours per credit whereby an academic hour in Russia is equal to 45 minutes.

A full-time year consists of 60 credits, making the Russian system compatible with the ECTS credit system. A four-year bachelors requires 240 credits while a five-year one requires 300 credits. A two-year masters programme, which follows the bachelors, requires 120 credits. The credit system is not applicable for the research-based degrees: the Candidate of Sciences and Doctor of Sciences.

7. Summary: General Aspects

The majority of the systems discussed above have undertaken research on the number of hours that are necessary to achieve learning outcomes. Different types of interrelated elements that

⁹ Ann M. Koenig (2013) Latest Russian higher education curriculum standards mandate use of “credit units” in AACRAO International Education Services <http://www.aacrao.org/resources/resources-detail-view/latest-russian-higher-education-curriculum-standards-mandate-use-of--credit-units->



influence “productivity”—i.e. the time to obtain the required level of learning by a student—could be identified. These include:

- i. Diversity of traditions
- ii. Curriculum design and context
- iii. Coherence of curriculum
- iv. Teaching and learning methods
- v. Methods of assessment and performance
- vi. Organization of teaching and learning
- vii. Ability and diligence of the student
- viii. Personal and material means available

VIII—African Higher Education System

1. Introduction

One of the challenges facing African higher education system is the difficulty in transferring part or whole of a study from one region to another or from one institution to another. This is due to lack of reliable tools for measuring student achievements in a transparent way as well as the absence of defined systems which allow adequate recognition of degrees and other credentials among institutions and between countries.

The concept of “credit” refers to the amount of learning contained in a qualification or part-qualification (SAQA, 2014). In the Bologna system, credits reflect the total workload required to achieve the objectives of a programme—objectives which are specified in terms of the learning outcomes and competences to be acquired—and not just through lecture hours. It makes study programmes easy to read and compare for all students, local and foreign, and therefore facilitates mobility and academic recognition (Khelifaoui, 2009). Little information is available on how a period of study is recognized—both among universities and between countries in Africa.

In Africa, there is no common and reliable means of measuring and transferring acquired knowledge. In some countries, the concept of credit has limited understanding and a variety of meanings and different applications. There is thus a compelling need to understand and recognize the different types of credits systems that are being used in different parts of Africa and hence this endeavor to establish one.

A study was carried out to investigate the different types of credit systems that exist in African countries. It is anticipated that this endeavor will contribute to the realization of transferability of studies in the continent possible by promoting comparability of degrees, diplomas and certificates. The contribution of a streamlined continental credit system—for the development of the African higher education space in particular the integration of the continent in general—is paramount.

2. Methodology

This initiative is implemented on behalf of the European and African Union Commissions by:





This study was carried out through a questionnaire survey distributed to country participants in the Tuning Africa Phase II programme. Country participants with an average of four institutional membership in each country were requested to complete questionnaires. Responses were received from 35 African countries, as indicated in Table 3.

After the surveys were completed, they were subjected to verification by respective regulatory agencies or ministry officials in their countries (where the former does not exist). The analysis of the various country reports constitutes the focus of this section.

3. Results

3.1 Status of Regulatory Agencies in African Countries

Among the 35 countries covered in this survey, 25 of them have national regulatory agencies. Three of the five countries in North Africa in this study have national regulatory agencies. All the countries in North Africa under this study are committed to the Licentiate-Masters-Doctorate (LMD) reforms.

Table 3: Status of National Regulatory Agencies in the Countries under Study

Region	Countries covered by the study	Countries with established quality assurance regulatory agencies
Northern	Algeria, Egypt, Libya, Mauritania, Morocco, Tunisia	Egypt, Libya, Tunisia
Southern	Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zimbabwe	Botswana, Lesotho, Mozambique, Namibia, South Africa, Zimbabwe
East	Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Madagascar, Mauritius, Somalia, Sudan, Tanzania, Uganda	Burundi, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, Uganda
West	Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, Mali, Nigeria, Senegal	Conseil Africain et Malgache pour l'Enseignement Supérieur (CAMES) for Benin, Burkina Faso, Cote d'Ivoire, Mali, Senegal. Regulatory agencies in Cape Verde, Mali, Nigeria
Central	Cameroon, Democratic Republic of Congo (DRC)	Cameroon
Total		35

In Southern Africa, there are well established quality assurance regulatory agencies in Botswana, Lesotho, Mozambique, Namibia, South Africa and Zimbabwe. The ministries of education currently carry out regulatory functions for higher education in Angola, Madagascar, Malawi and Mauritius. All the Southern African countries under this study, except Angola, have credit systems.



In East Africa, Djibouti and Somalia have no national quality assurance regulatory agencies, while Burundi, Eritrea, Ethiopia, Kenya, Rwanda, Tanzania and Uganda have well established national quality assurance agencies.

In West Africa, the Ministry of Education and Conseil Africain et Malgache pour l'Enseignement Supérieur (CAMES) provide regulatory functions for higher education institutions in the French speaking countries of Benin, Burkina Faso, Cote-d'Ivoire, Guinea, Mali, Niger, Senegal, and Togo. Although Guinea Bissau is a Portuguese speaking country, it has also subjected itself to the regulatory activities of CAMES. As expected in existing regional protocols such as CAMES and the ECOWAS Convention on the recognition and Equivalences of Education, some Member States (Cape Verde, Ghana, Mali, Nigeria, Senegal and Sierra Leone) have established national regulatory agencies.

Only three countries were covered in Central Africa under this study. Higher education regulations in Cameroon is under the CAMES system, while that of the Democratic Republic of Congo is under the control of the Ministry of Education. The number of countries with national higher education regulatory agencies has increased since the report produced by Materu (2006) on the same subject.

3.2 The Prevalence of a Credit System

In North Africa, all the countries in this study are committed to the LMD system; and credit systems operate in their higher education institutions. However, not all the universities in the five countries employ a credit system. Some universities are still using the old British system.

In Southern Africa, only Angola lacks a credit system. All the other eight countries have one form of credit system or another. All universities in Madagascar, Mauritius, Namibia and South Africa maintain a credit system. As in the case of the North African countries, not all universities in Botswana, Lesotho, Malawi, Mozambique and Swaziland currently operate a credit system. In Zimbabwe, 15 universities have committed to change from Course Unit System to Credit System.

In East Africa, a credit system started with Kenya in 1968; and in 2012, Burundi became the latest country to adopt the system. It is only in Somalia that a credit system does not exist in east Africa. Some of the countries, such as Djibouti, have not been able to apply a credit system to their medical programmes.

In West Africa, a credit system started in Nigeria in 1968 and developed widely between 2008 and 2010 in other countries. Some programmes in medicine are exempted from the credit system.

In Central Africa, a credit system started in Cameroon in 2007 and most universities there operate the LMD. Not all universities in the Democratic Republic of Congo (DRC) operate a credit system though LMD is at a pilot phase at the University of Lubumbashi.

There are various publications in the different regions on their operations of a credit system. Countries where these publications have been produced include Algeria, Cameroon, Madagascar, Mozambique, Nigeria, South Africa, and other countries under the purview of CAMES protocol.



3.3 Measuring Credit

Generally, the process of accreditation includes peer reviews, site visits and a report to establish quality, capacity, outcomes and need for improvement.

In North Africa, credit is measured in terms of the teacher contact hours with the learners. In some cases, both the staff contact hours and the time taken for the students to carry out independent studies are taken into consideration. Tunisia is an exception.

In Southern Africa, most of the countries use notional hours including contact time, structured learning, workplace learning, assessment and self-study. (One credit amounts to 10 notional hours.) However, in Mauritius, a credit is based on staff contact hours where one credit unit is equivalent to one hour lecture or three hours of practical or one hour of tutorial that spans over 15 weeks.

In many countries in East Africa, contact hours and independent work of students are employed in determining credit. However, in Ethiopia and Djibouti, contact hours are employed for measuring credit.

In West Africa, credit is measured using the staff contact hours only. In Nigeria, one credit unit means a course work of one hour lecture or three hours of practical or one hour of tutorial, over a 15-week semester term.

Similarly, contact hours are used to measure credit in Central Africa. There are few universities which are using both contact hours and students learning hours in the calculation of credits.

3.4 Value of Credits in Different Levels

A credit does not have the same value in the countries and regions studied, as shown in Table 4. One credit load is made up of 20 to 25 hours of teaching and learning hours. In some other cases, it is one hour of teaching over a period of 15 to 16 hours, or practical classes of two to three hours over a semester made up of 15 to 16 weeks.

Table 4: Values of One Unit in Different Regions

Credit system	Value of one credit unit course	Region where applicable
Contact hours teacher's workload	1 hour of lecture over 15 weeks	Northern Africa, Western Africa
	2 hours of practical over 15 weeks	Northern Africa
	20-25 teaching and learning hours	Northern Africa
	3 hours of practical for 15 weeks	Western Africa
	1 hour of tutorials for 15 weeks	Western Africa, Northern Africa
	10 hours of notional hours made up of contact time, structured learning, workplace learning, assessment, and self-study	Southern Africa, Eastern Africa
	15-18 hours of notional hours made up of	Eastern Africa



Learners' centred	contact time, structured learning, workplace learning, assessment, and self-study	
	15 hours of lectures and 10 hours of independent work	Eastern Africa

In Eastern and Central Africa, contact hours and independent work of students are employed in determining the value of credits. Accordingly, one unit is equivalent to 10 notional hours; one credit is equivalent to 15 to 18 contact hours or students workload; and one unit is equivalent to 15 hours of lectures and 10 hours of independent work.

In many countries in West Africa, contact hours are used in determining credits. Accordingly, one credit is equivalent to one contact hour or three hours of practical or one hour of tutorial per week for 15 weeks. The credit load per year varies from institution to institution and from country to country, as shown in Table 5.

Table 5: Credit Load per Year

Region	Credit Points Per Year
North	30 – 60 units
South	18 – 60 units
East	36 – 60 units
West	30 units, 48 units, 60 units
Central	36 – 60 units

The credit load for various programmes is different among the regions as shown in Table 6. However, a common credit point per year across the continent appears to be 60 units.

Table 6: Credit Loads for Different Programmes

Region	Bachelors	Masters	Doctorate
Northern	120–180	36 units or 130–136 units	No information provided
Southern	60, 100, 120 credits	60, 120, 180	120, 360, 480
East	In Burundi, 180 (But 420 for Medicine and 240 for Engineering) 60, 135, 120, 180 units for others	120–136, 360	
West	180–360	36–180	120
Central	108–180	120	300

IX—Workload in Africa: Highlights of a Study

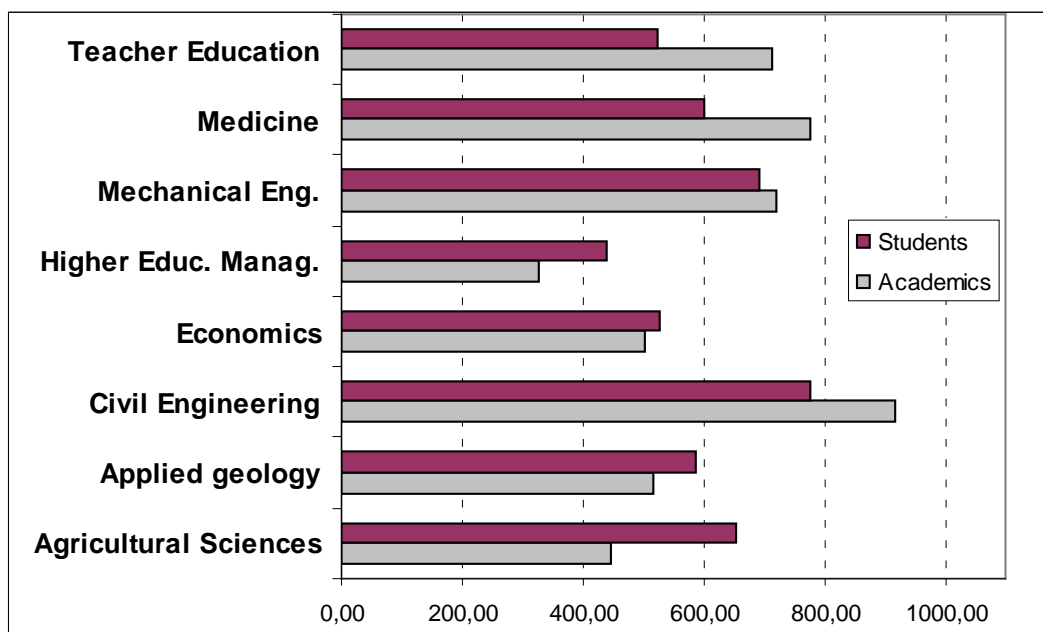
A study was undertaken to establish the scope and prevalence of workload in African higher education systems based on a survey which involved 571 academics and 5,266 students in 107 institutions which are participating in the Tuning Africa II Phase. The study explored the extent of workload to learn a unit/course/module in a semester on the basis of contact hours and independent work.



The study examined workload by field/discipline which included seven undergraduate disciplines: Agricultural sciences, Economics, Civil Engineering, Mechanical Engineering, Applied Geology, Medicine, Teacher Education, and one post-graduate programme: Higher Education Management. Except Teacher Education, a striking similarity of opinion between students and academics, as regards to contact hours vs independent work, is recorded. In a similar trend academics and students from all the five African regions—North, South, Central, East, West—have exhibited considerable congruity on the number of contact hours vs independent work to learn a unit/course/module in a semester.

Figure 1 presents the number of hours that students and academics thought it would be required to complete all the requirements of a unit/course/module in a semester, per fields/discipline, taking into account both contact hours and independent work. Civil Engineering stood highest, followed by Medicine and Teacher Education, for academics. Civil Engineering stood again the highest, followed by Teacher Education and Applied Geology, for students.

Figure 1: Hours Needed to Complete All the Requirements of a Unit/Course/Module in a Semester per Disciplines/Field



According to the study, the student workload over a period of a year spans from 1,350 to 1,800 hours, which TAPAG endorsed after further deliberation. This compares relatively well with Europe standing at 1,500 to 1,800 hours and Latin America at 1,440 to 1,980 hours for both contact hours and independent work.

X—Conclusion

African higher education has an array of schemes in credit systems, credits, and workloads without whose harmony the key mission of the continental higher education space in particular and the African Union’s vision—of an integrated, prosperous and peaceful



continent—in general may remain elusive. Hence, the need for a systematic and rigorous description and analysis of establishing common and basic, but key and critical, frameworks and pillars of the harmonization process.

Through extensive research undertakings and intensive dialogue of the TAPAG, the definition of a credit system and workload have now been established. The Group also agreed to the total number of hours of a workload per year.

From the study, the following findings can be deduced about the state of the art of credit in African higher education system.

- i. Credit system has been functional in the African Higher Education systems for many years.
- ii. African universities consider credit as a tool for measuring the load of the teacher rather than as an expression of the volume of learning based on defined learning outcomes and associated workload.
- iii. In many African institutions, credit is measured based on the contact time with the teacher.
- iv. Credit does not have the same value in all the countries and regions. (Anglophone and Francophone credit systems differ.)
- v. There is currently no credit transfer system among institutions in Africa.
- vi. The load of credit is not comparable among institutions in Africa.

XI—Recommendation

- i. There is a compelling need to have a common agreement on the definition and value of a credit in the African higher education systems in order to promote transferability and comparability—key to harmonizing the African higher education space and promote mobility.
- ii. There is a need for consensus on the workload of a credit unit. The general trend is that 60 credits are equivalent to the workload of full-time student during one academic year. We thus recommend to adopt this widespread international trend of 60 credits for Africa.
- iii. There is a need for consensus on the number of credit units for each year and for the different programmes, i.e. Bachelors, Masters and Doctorate.
- iv. There is a need for a consensus on the student workload over a period of a year which straddles between 1,350 and 1,800 hours. We thus recommend to adopt between 1,350 and 1,800 hours of workload for Africa which sits well within the international norms.
- v. There is a need for a harmonized continental credit system that balances the different systems that span the continent: Anglophone, Francophone and Lusophone countries.
- vi. With increasing harmonization and recognition of credentials at sub-continental level within the Regional Economic Communities (RECs), as in East Africa and



West Africa (CAMES), lessons could be drawn for—and thus consolidate—the continental credit system.

XII—References

- African Development Bank (2008). *Higher Education, Science and Technology Policy*. Abidjan: African Development Bank.
- African Union (2014). *Agenda 2063: The Africa We Want*. Addis Ababa: African Union.
- African Union (2006). *Second Decade of Education for Africa (2006-2015): Plan of Action*. Addis Ababa: African Union.
- African Union Commission (2016). *Continental Education Strategy for Africa (CESA 2016-25)*. Addis Ababa: African Union.
- African Union (2014). *Science, Technology and Innovation Strategy for Africa 2024 (STISA-2024)*. Addis Ababa: African Union.
- Koenig, A. M. (2013). Latest Russian higher education curriculum standards mandate use of “credit units” in AACRAO International Education Services. <http://www.aacrao.org/resources/resources-detail-view/latest-russian-higher-education-curriculum-standards-mandate-use-of-credit-units->
- Association for the Development of Education in Africa (ADEA). <http://www.adea.org>
- Bloom, D., Canning, D., Chan, K., & Luca, D. L. (2013). Higher Education and Economic Growth in Africa. *International Journal of African Higher Education* (1)1: 23-57.
- European Commission (2014). European Commission's Views on education in the Post-2015 Development Agenda and commitments to support the sector. High level discussion “Education in the Post-2015 Development Agenda”, Norwegian Mission to the EU – 5 February 2014. https://ec.europa.eu/europeaid/sites/devco/files/com-2015-44-final-5-2-2015_en.pdf
- European Commission (2015). ECTS’s User Guide 2015 http://ec.europa.eu/dgs/education_culture/repository/education/library/publications/2015/ects-users-guide_en.pdf
- European University Association (2010). “Africa-Europe Higher Education Cooperation for Development: Meeting Regional and Global Challenges. White Paper: Outcomes and Recommendations of the Project: Access to Success: Fostering Trust and Exchange between Europe and Africa (2008-2010)”. Brussels: EUA. www.eua.be/.../Africa-Europe_Higher_Education_Cooperation_White_Paper_EN.pdf



- Khelifaoui, H. (2009) The Bologna Process in Africa: Globalization or Return to “Colonial Situation”. *Journal of Higher Education in Africa* 7, 21-38.
- Materu, P. (2006) Higher Education Quality Assurance in Sub-Saharan Africa *Status, Challenges, Opportunities, and Promising Practices*. World Bank Working Paper No. 124. Washington DC: The World Bank.
- Organisation for Economic Cooperation and Development. Higher Education for Sustainable Development—Final Report of International Action Research Project. <http://www.oecd.org/education/innovation-education/centreforeffectivelearningenvironmentscele/45575516.pdf>
- South African Qualification Framework (2014) Policy for Credit Accumulation and Transfer within the National Qualification Framework, pp. 4. Pretoria, South Africa: SAQA.
- Souto-Otero, Manuel (2013). Review of Credit Accumulation and Transfer Policy and Practice in UK Higher Education, University of Bath. https://www.heacademy.ac.uk/system/files/resources/review_of_transfer_of_credits_report.pdf
- Teferra, D., (2014). Charting African Higher Education—Perspectives at a Glance. *International Journal of African Higher Education* (1)1: 9-21.
- Teferra, D., and Hahn, K. (2012). Harmonization and Tuning: Integrating the African Higher Education Space. *Inside Higher Education: The World View*. <https://www.insidehighered.com/blogs/harmonization-and-tuning-integrating-african-higher-education-space> Accessed on 13 July 2017.
- UNESCO (1998). World Declaration on Higher Education for the Twenty-First Century: Vision and Action and Framework for Priority Action for Change and Development in Higher Education. Paris: UNESCO. http://www.unesco.org/education/educprog/wche/declaration_eng.htm#world%20declaration
- UNESCO (2004). *Higher Education for Sustainable Development, Education for Sustainable Development Information Brief*. Paris: UNESCO.
- UNESCO (2009). *The World Conference on Higher Education*. UNESCO: Paris. <http://www.unesco.org/en/wche2009/>.
- United Nations (2015). Sustainable Development Goals. Paris: UNESCO. <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>
- World Bank (2008). *Accelerating Catch-up: Tertiary Education for Growth in Sub-Saharan Africa*. Washington DC: The World Bank.

