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Mr. Mark Olweny

Associate Dean, Faculty of the Built Environment

Uganda Martyrs University, Nkozi

August 2016.
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Mr. Jouni Kaipia
BArch/M.Arch(Hons.) (HUT)
Visiting Professor
Teaching: Architecture Design; Construction

Dr. Antony Radford
BA(Hons.), BArch(Hons) (Newcastle UK), DipTP (EdinCollArt), PhD (Syd.) FAIA
Visiting Professor
Teaching: Architecture Design; Design Computing

Dr. Chrisna Du Plessis
BArch, M.Arch(Pretoria), PhD(Salford), DTech(Chalmers)
Associate Professor, Department of Construction Economics, University of Pretoria, South Africa.

Mr. Paul Pholeros AM
BSc(Arch), BArch(Hons) (Sydney), LFAIA
Paul Pholeros Architect / Healthabitat (Pty. Ltd.), Sydney, NSW, Australia.

Ms. Pricitill Lubega
BSc(TI) (Mak)
Facility Administrator

Mr. Patrick Mugeme
Dip(MechEng) (UTC Kichwamba)
Materials Laboratory Technician

Vice-Chancellor
Prof. Dr. John Chrysostom Maviiri

Deputy Vice-Chancellor, Academic Affairs (Acting)
Dr. Speranza Namusisi
The Faculty of the Built Environment is a multidisciplinary faculty that offers programmes and courses in Architecture, Landscape Architecture, Environmental Design and Building Technology, with an emphasis on environmental sustainable design (ESD). A key goal is to educate responsible professionals who can contribute to the cultural and socio-economic development and change in East Africa and the global community through participation in design, construction and interpretation of built environments.

The Faculty recognises that in a continuously changing world, professional experience and research are important contributors to achieve its mission. Academic faculty are therefore accomplished in their respective fields, achieved through research, experience and collaboration, all contributing to teaching and scholarship in the Faculty. Further, to enrich the research and learning environment, the Faculty seeks to recruit staff with teaching and research experience from across the world.

Our multidisciplinary curriculum is designed to foster critical and creative thinking, to enable students and graduates to engage with the environmental, social, and aesthetic challenges of the contemporary milieu. Most courses in the Faculty are taught through a problem-based integrated teaching approach, that integrates design with the techniques and practices of construction, structures, materials and building services, all within a theoretical and historical context, keeping in mind human needs (social, physiological and cultural).

In 2011, the architecture programme in the Faculty, comprising the Bachelor of Environmental Design (Honours) – Part I; and the Master of Architecture (Professional) – Part II, were evaluated by the Commonwealth Association of Architects (CAA) and were subsequently validated and added to the CAA list of Qualifications in Architecture Recommended for Recognition. The next validation visit is scheduled for 2017.

**Faculty Objectives**

- To be at the forefront of built-environment education and research;
- To promote and undertake research into various aspects of the built environment;
- To graduate men and women who are artistically creative, technically competent, and have an appreciation of social, environmental and historical issues as these relate to the built environment;
- To promote innovation and excellence in teaching and learning.
- To encourage an understanding of principles related to the advancement and development of our built environments;
degree programmes

The Uganda Martyrs University may grant the following degrees to students who, under conditions laid down in University Regulations, have successfully completed the approved programme of study and have passed the prescribed examinations of the University.

bachelor of environmental design - B.Envi.Des.

The Bachelor of Environmental Design is a three-year full-time degree programme that serves as a qualifying programme for students wishing to enrol in the graduate professional programmes such as Architecture and Landscape Architecture. It also serves as a course of study for individuals seeking mid-level positions in various built environment disciplines, as well as for those already employed in the industry but seeking to upgrade their knowledge and skills. The programme may also form the basis for entry into other disciplines such as: Urban and Regional Planning, Urban Design and, Environmental Design. The degree of Bachelor of Environmental Design may be conferred at Ordinary or Honours level.

The Bachelor of Environmental Design has been designed in accordance with the Architecture Education Policy of the Uganda Society of Architects (USA); the Qualifications in Architecture Recommendations of the Commonwealth Association of Architects (CAA), and; the Educational Objectives for Professional Education Programmes in Landscape Architecture as specified by the International Federation of Landscape Architects (IFLA). The degree programme is considered equivalent to Part 1 of the three part professional curriculum in Architecture.

Candidates for admission to the Bachelor of Environmental Design programme must have achieved as a minimum, the Uganda National Council for Higher Education (UNCHE) university entry requirements. Applicants with an equivalent award from another educational system will be evaluated on a case-by-case basis. Applicants will be required to undergo an additional aptitude test as part of the selection process. Applicants may be required to attend an interview with a selection panel. For further details, contact the Faculty Office.

graduate diploma in environmental design - Grad.Dip.(Envi.Des.)

The Graduate Diploma in Environmental Design is an intensive one or two-year full-time programme intended for individuals who have a previous qualification in a related built environment discipline, as well as extensive experience in a relevant field, but would like to pursue a professional degree programme offered by the Faculty. The programme may also appeal to individuals who would like to upgrade their knowledge and skills.

academic staff (sessional)

Ms. Doreen Adengo
BSc(Arch) (CatholicU), MArch (Yale), AIA, MUSA
Lecturer
Teaching: Architectural Design; Design Philosophy; Design Theory

Mr. Joshua Ainebyona
BSc (Surveying and Land Information Systems) (Kyambogo)
Lecturer
Teaching: Land Surveying

Mr. David Alicha
BSc(Forestry) (Mak), Cert(Horticulture), Nat.Dip(Horticulture), Dip(Horticulture) (Kew),
Lecturer
Teaching: Landscape Ecology; Planting and Design

Mr. Campbell Drake
BArch (RMIT) MRes.(Arch) (Goldsmiths)
Lecturer
Teaching: Architecture Design, Landscape Architecture, Construction

Mr. Philip Kaheru
BSc(Quantity Surveying) (Hons) (Reading) MISU
Lecturer
Teaching: Building Economics

Mr. Conrad Goodman Kazoora
BEnviDes(Hons), MArch (Uganda Martyrs)
Lecturer
Teaching: Sustainable Design; Design Computing

Mr. Felix Holland
Dipl.Ing.(Arch) (Hochschule Bildende Künste Hamburg)
Lecturer
Teaching: Architectural Design

Ms. Sarah Mbasanze
Dip(Bldg.& Civil Eng) (UTC Masaka), BSc(Civil & Ind.Cons.) MSc(Eng.) (Univ. Sci.&Tech. Khemis)
Lecturer
Teaching: Building Technology; Statics
academic staff (full-time)

Mr. Achilles Ahimbisibwe
BSc(BDT)(Hons), MArch (Uganda Martyrs)
Lecturer
Course Coordinator: ENDS-1140; ENDS-1241
Teaching: Architectural Design; Statics; Construction

Mr. Timothy Latim
BSc(Arch), BArch(Hons), March(Prof) (Pretoria)
Lecturer
Course Coordinator: ENDS-1121; ENDS-1222
Teaching: Architectural Design; Urban Design

Mr. Peter Kasozi
Dip SIVIL ARK, MUrbanism (AHO) MNAL MUSA
Lecturer
Course Coordinator: ENDS-1151; ENDS-2111; ENDS-1252
Teaching: Architectural Design; Design Computing; Urban Design

Mr. Alex Ndibwami
BSc(BDT)(Hons), BArch(Hons), MArch (Uganda Martyrs)
Lecturer
Course Coordinator: ENDS-1101; ENDS-2361; ENDS-3362; ENDS-3271
Teaching: Culture and Architecture; Computer Applications; Construction

Mr. Morris Oleng
BEng(Civi&Bldg) (Hons), (Kyambogo)
Assistant Lecturer
Teaching: Structures; Concrete Technology; Construction.

Dr. Mark R.O. Olweny
BArchSt (Hons), BArch (Hons) (Adel) MReg &Urb Pl (SAust), MArchSt (Adel), PhD(Cardiff) MUSA, AsAIA
Senior Lecturer/Associate Dean
Course Coordinator: ENDS-2212; ENDS-3113
Teaching: Architecture Design; Professional Practice; Architectural Science; Sustainability; Design Computing.

Dr. Paul Thomas
BSc, MSc, (Eng Arch), PhD (Ghent)
Professor
Course Coordinator: ENDS-2142; ENDS-2243; ENDS-3144; ENDS-3245
Teaching: Structural Engineering; Concrete Technology; Construction

Candidates for admission to the Graduate Diploma in Environmental Design programme must have obtained as a minimum; a Degree or Diploma in a related field, with high standing. Applicants should generally have undertaken at least five years of RELEVANT professional experience with a Registered Architect. All applicants will also be required to submit: i, a curriculum vitae; ii, a portfolio of design and creative work; iii, undertake a formal written exercise. Applicants may also be required to attend an interview with a selection panel. For further details, contact the Faculty Office.

master of architecture (professional) – M.Arch.(Prof.)
The Master of Architecture (professional) degree is a two-year full-time programme that builds upon the B.Envi.Des.(Hons.) or the Grad.Dip.(Envi.Des.) and is intended for individuals who wish to work as professional Architects. The programme seeks to qualify highly capable, creative, innovative, and insightful architects, skilled in their approach to architectural design and practice.

The Master of Architecture (professional) programme has been designed in accordance with; the Architecture Education Policy of the Uganda Society of Architects (USA), and; the Qualifications in Architecture Recommendations of the Commonwealth Association of Architects (CAA). The programme has been developed in accordance with the Bologna Agreement (1999). The degree programme is validated as being equivalent to Part II of the three part professional curriculum in Architecture.

Candidates for admission to the Master of Architecture (professional) programme must have obtained the Honours degree of Bachelor of Environmental Design (Architecture) or the Graduate Diploma in Environmental Design of Uganda Martyrs University. Applicants with an equivalent award from another educational institution, will be evaluated by the Faculty on a case-by-case basis. In some cases, additional courses may be required. All applicants will be required to submit: i, a curriculum vitae; ii, a portfolio of architecture related creative work; iii, undertake a formal written exercise. Applicants may also be required to attend an interview with a selection panel. For further details, contact the Faculty Office.

master of landscape architecture (professional) – M.Land.Arch.(Prof.) (not offered 2016/17)
The Master of Landscape Architecture (professional) degree is a two-year full-time professional programme that builds upon the B.Envi.Des.(Hons.) or the or the Adv. Dip.(Envi.Des.) and is intended for individuals who wish to work as professional Landscape Architects. The programme seeks to qualify highly capable, creative and insightful Landscape Architects, skilled in their approach to landscape architectural design and practice.
The Master of Landscape Architecture (professional) programme has been designed in accordance with the Educational Objectives for Professional Education Programmes in Landscape Architecture as specified by the International Federation of Landscape Architects (IFLA).

Candidates for admission to the Master of Landscape Architecture (professional) programme must have obtained the Honours degree of Bachelor of Environmental Design (Landscape Architecture) or the Graduate Diploma in Environmental Design of Uganda Martyrs University. Applicants with an equivalent award from another educational institution, will be evaluated by the Faculty on a case-by-case basis. In some cases, additional courses may be required. Applicants may also be required to attend an interview with a selection panel. For further details, contact the Faculty Office.

**master of environmental design – M.Envi.Des. (not offered 2016/17)**

The Master of Environmental Design degree is a two-year full-time professional programme that builds upon the B.Envi.Des. or other professional built environment programmes. The Master of Environmental Design prepares students for careers in environmental science from an interdisciplinary perspective. Students are expected to engage in scholarly research and develop specific knowledge and skills through learning and research in relation to the built environments. This will embrace a wide spectrum of learning and research including: ecological management and planning; building science and technology; sustainable design; history and theory of design; international development; and computer applications in environmental design. The degree of Master of Environmental Design may be conferred at Pass, Credit or Distinction level.

Candidates for admission to the Master of Environmental Design programme must have obtained the Honours degree in a related built environment discipline, and have at least one year of relevant practical experience. Applicants may also be required to attend an interview with a selection panel. For further details, contact the Faculty Office.

**ARCH-7262 ARCHITECTURE MASTERS THESIS B**

**Contact Hours**
up to 5 hours of lectures, tutorials, workshops, seminars and studio sessions per week. Actual hours vary from week to week.

**Description**
These seminar series aims to further develop the students’ research report as an integral part of the Master of Architecture. It involves focused research on a selected topic working with a designated supervisor on a selected topic conducted through a series of seminars and one-on-one sessions. Reading and research material will be mainly of scholarly nature. The exact nature of the final thesis may vary depending on the area of research.

**Assessment**
Presentation of a seminar paper (20%) and a final thesis (depending on the requirements of the research area) of between 15,000 and 20,000 words (80%).
Description
These seminar series aims to further develop the students’ research report as an integral part of the Master of Architecture. It involves focused research on a selected topic conducted through a series of lectures and seminars and working with a designated supervisor on a selected topic conducted through a series of seminars and one-on-one sessions. Reading and research material will be mainly of scholarly nature. The exact nature of the final report may vary depending on the area of research. The research project may be linked to the design project in ARCH-7270 Architecture Project.

Assessment
Assessment will include a student demonstrating written and visual presentation skills. A major illustrated essay approx 8,000 to 10,000 words, articulating and communicating the outcomes of research investigations in the fields of history and theory of architecture, landscape architecture, and urban design (first draft 30%, final submission 70%).

ARCH-7161 ARCHITECTURE MASTERS THESIS A

Contact Hours
up to 5 hours of lectures, tutorials, workshops, seminars and studio sessions per week. Actual hours vary from week to week.

Description
This course introduces students to the skills, methods, and practices of advanced and independent research work. It gives a background to research methodology and research methods in architecture and is geared to help student define their research proposals and undertake formal research work. This course aims to further develop the students’ critical design thinking, expand their theoretical and historical understanding, and heighten their awareness of the social, ethical, and environmental responsibilities. Research projects offered will relate to the Faculty’s identified research areas that include Design & Culture, and Sustainability & Environmental Design. Note, actual topics will depend upon staff availability. On completion of the course students will have demonstrated the ability to undertake a sustained research activity and an understanding of the literature and the methods in a specialised research area.

Assessment
Assessment will include a student demonstrating written and visual presentation skills. Exercises on research methods and scholarly writing. Submission of a completed research proposal. (projects 60%, outline thesis 40%).

career prospects

bachelor of environmental design - B.Envi.Des.
Graduates of the Bachelor of Environmental Design (B.Envi.Des.) programme can take up careers in a wide range of areas in the built environment industry: as assistants to Architects, Landscape Architects, Urban Designers, Interior Architects or Engineers; or as Civic officials in building and planning departments.

Graduates who wish to pursue professional careers may, after the completion of the pre-requisite requirements, apply for entry into a professional degree programme offered by the Faculty. Opportunities also exist for graduates to pursue further studies in the different Built Environment fields at educational institutions offering instruction in the desired field, such as Architecture, Landscape Architecture Urban Design, Planning, or Interior Architecture.

g graduated diploma in environmental design - Grad.Dip.(Envi.Des.)
The graduates of the Graduate Diploma (Environmental Design) (Grad.Dip.(Envi. Des.) programme can pursue one of the professional degrees offered by the Faculty. The programme may also act as a stand-alone programme for individuals seeking to update and upgrade their knowledge and qualifications.

master of architecture (professional) – M.Arch.(Prof.)
After completion of two years professional experience with a Registered Architect and successfully completing the examination in professional practice set by the Uganda Society of Architects (USA), graduates of the Master of Architecture (M.Arch.) professional programme, may apply for Corporate membership with the USA. They can then apply for a Practice Certificate from the Architects Registration Board (ARB) of Uganda. In addition to career paths as Architects, Graduates may move into the Academic field, while others may apply their education professionally within other multi-disciplinary fields.

master of landscape architecture (professional) – M.Land.Arch.(Prof.)
Graduates of the Master of Landscape Architecture (M.Land.Arch.) professional programme may, after completion of the required professional experience and successfully completing the examination in professional practice set by the International Federation of Landscape Architects (IFLA), apply for Associate membership of IFLA. Career paths exist in a variety of areas related to the built environment.
**master of environmental design – M.Envi.Des.**
The Master of Environmental Design (M.Envi.Des.) builds upon existing professional skills and is designed to enable graduates to work in the increasingly complex areas related to the design and management of sustainable built environments. Opportunities exist at various levels of government and private institutions.

**Assessment**
Attendance and participation in seminars and workshops. Written reports and presentations.

**ARC-7270 ARCHITECTURE PROJECT**

**Contact Hours**
up to 12 hours of lectures, tutorials, workshops and seminars per week

**Description**
A single project, of a student's own choice and of moderate to high complexity. The project and the associated responses should demonstrate all phases of architectural designing: sketch plans, technical development - including one specialised topic - and a final presentation which should show a thorough integration of all major aspects of the academic program.

**Assessment**
Preliminary design presentations (30%), final project (70%).

and either:

**ARCH-7151 ARCHITECTURE MASTERS SEMINAR A**

**Contact Hours**
up to 5 hours of lectures, tutorials, workshops, seminars and studio sessions per week. Actual hours vary from week to week.

**Description**
This course introduces students to the skills, methods, and practices of advanced and independent research work. This course aims to further develop the students’ critical design thinking, expand their theoretical and historical understanding, and heighten their awareness of the social, ethical, and environmental responsibilities they carry as future architects. It gives a background to research methodology and research methods in architecture and is geared to help student define their research proposals and undertake formal research work.

**Assessment**
Assessment will include a student demonstrating written and visual presentation skills. Exercises on research methods and scholarly writing. Submission of a completed research proposal. (projects 60%, outline thesis 40%).

and

**ARCH-7252 ARCHITECTURE MASTERS SEMINAR B**

**Contact Hours**
up to 5 hours of lectures, tutorials, workshops, seminars and studio sessions per week. Actual hours vary from week to week.
ARC-7103 ARCHITECTURE STUDIO C 10.0
Complex Buildings

Contact Hours
up to 15 hours of lectures, tutorials, workshops, seminars and studio sessions per week. Actual hours may vary from week to week.

Prerequisite:
Passes in at least three of Architecture Studio courses at Level I.

Description
Content: This course unit emphasises the integration of building services and structure within complex buildings. Typical programmes might include institutional buildings, transportation facilities and projects of a cross-cultural nature, presenting a full range of design considerations. The course will present, in an educational setting the processes by which complex architecture projects are managed, initiated, developed and documented, looking at the various stakeholders, environment, and means of achieving design objectives. Students will develop proposals for a mixed-use urban project or projects raising significant urban design issues. The project will highlight stages from project conception and planning through to construction and documentation. The studio project will be undertaken in conjunction with ARCH-7113 Professional Practice and Practice Management.

Assessment
Written, verbal and graphic communication. Assessment will be based on two components: Component A, the realisation and communication of architectural ideas in response to a design situation; Component B, the technical description and justification of the architectural design. Students must pass both components to pass the course.

ARC-7113 PROFESSIONAL PRACTICE AND PRACTICE MANAGEMENT 5.0

Contact Hours
up to 5 hours of lectures, tutorials, workshops and seminars per week

Description
This course examines local and global issues of practice management and related areas of professional practice and project management in relation to the Architecture and Landscape Architecture professions. Topics covered include: practice management: ethical practice; the character and operation of practices; legal requirements; cash flow and profitability; running a business; professional memberships and registration; risk and professional liability; and personal career planning; project management include: project stages; procurement and feasibility; statutory requirements; management of time, cost and quality; and contracts and contract administration in private and public realms. The course is undertaken in conjunction with ARCH-7103 Architecture Studio C, and LARC-7103 Landscape Architecture Studio C.

faculty organisation and student advisors

Students enrolled in programmes and courses within the Faculty can receive help and advice from a number of sources:

Dean: has overall responsibility for the Faculty. The Dean makes recommendations for the recruitment of new faculty and general staff, and oversees the administration and financial aspects of the Faculty. The Dean is also responsible for general matters concerning students in the Faculty as well as monitoring student progress throughout the academic year. In conjunction with the Associate Dean, the Dean oversees the scheduling of teaching assignments, and prepares course schedules for each semester. The Dean is available to students for consultation by appointment - email: fbe@umu.ac.ug.

Associate Dean (Academic Affairs and Research): is responsible for the administration and coordination of the curriculum in the undergraduate and graduate programmes and for promoting research activities in the Faculty. The Associate Dean offers administrative assistance to staff in their research and for the coordination of student research in the Faculty. The Associate Dean is available for consultation by appointment – email: fbe@umu.ac.ug.

Programme Co-ordinators: are responsible for the overall coordination of activities within the academic programmes in the Faculty. For the 2016/17 Academic Year, the programme coordinators are: B.Envi.Des. – Alex Ndiibwami; M.Arch. – Mark Olweny; Grad.Dip.(Envi.Des.) – Vacant; M.Envi.Des. – Vacant; M.Land.Arch. – Vacant.

Year Co-ordinators: are academic members of staff responsible for the on-going wellbeing of students at each year level. Overseen by the Dean, Year Co-ordinators should be consulted for matters related to academic performance, workload, conflicts etc. that impact on student wellbeing. Year Co-ordinators are also responsible for liaising with the Dean and Associate Dean on matters pertaining to student welfare. Year Co-ordinators will be communicated to students at the beginning of each academic year.

Subject Co-ordinators: are academic members of staff responsible for the coordination of subject matter across all years of the undergraduate and graduate programmes. Subject Co-ordinators are also responsible for liaising with the Year Co-ordinators and Course Co-ordinators on matters pertaining to course content. Details of Subject Co-ordinators are provided at the back of this handbook.

Course Co-ordinators / Course Instructors: are responsible for all matters concerning particular course units, and presented in the course outlines. Questions and comments about particular courses should in the first instance always be addressed to the specific Course Co-ordinator responsible. Courses will often have several Course Instructors involved. In these courses, queries should be directed to
the Course Co-ordinator. Course Co-ordinators and Course Instructors are listed on course outlines.

**Tutors:** are an additional resource to help students with their educational development, and a vital part of the support network of the Faculty. Students will be generally be allocated a specific course tutor who will be able to provide one-on-one instruction during tutorials and at times after hours for particular course units. Note, however, tutors are not substitutes for Course Instructors, who should still be consulted if there are any specific course of curriculum related queries.

**Faculty Administrator:** is responsible for administrative duties within the faculty, and the coordination of general and final assessment timetabling. The Faculty Administrator is also responsible for, in conjunction with teaching staff, receiving submissions, coordination of course feedback, mark sheets, board meeting minutes and class lists.

**Student Representatives to the Faculty Board:** two student representatives; one for undergraduate and one for graduate students are elected to represent student interests on Faculty Board. Student Representatives are the main liaison between the student body and the Faculty.

**Year Representatives:** are elected by students in each year to represent the class. The Year Representative will liaise between the class, the Student representative to the Faculty Board and the Faculty Administration on any matters of concern to students.

**Student Mentors:** are senior students who volunteer to be guides for incoming freshers. Mentors meet with students on an individual basis and give new students an idea of what to expect whilst in the Faculty of the Built Environment, and Uganda Martyrs' University in general. Interested students should contact the representatives of the Built Environment Students Association (BESA) for further information.

**Design Computing Suite Assistants:** are appointed to take charge of the Faculty Computer facilities. This position involves: troubleshooting; reporting any problems to the Faculty, and; enforcing the rules of the Design Computing Suite as described in this booklet. Students wishing to take up these positions should have some background in Design Computing and be familiar with the programmes in the Design Computing Suite.

**Dean of Students:** acts as the liaison between the university administration, Uganda Martyrs University Student Union (UMUSU) and students. The Dean of Students should be the first contact for assistance for issues related to student welfare, or other non-academic matters.

ideas in response to a design situation; Component B, the technical description and justification of the architectural design. Students must pass both components to pass the course.
design modelling and simulation. Aspects of the course will deal with the design of rural landscapes.

Assessment:
Written, oral and graphic communication. Assessment will be based on two components: Component A, the realisation and communication of architectural ideas in response to a design situation; Component B, the technical description and justification of the architectural design. Students must pass both components to pass the course.

ARCH-6202 ARCHITECTURE STUDIO B 10.0
History / Construction

Contact Hours
up to 18 hours of lectures, tutorials, workshops, seminars and studio sessions per week. Actual hours may vary from week to week.

Content
This course explores the theory and practice of contemporary construction in the context of urban/rural environments. It explores strategies for design development and ideation and related issues of tectonics and the relation to construction and constructability. The course will also examine related issues around communication and representation. The studio will focus on the application of theory regarding the design, and construction of low-rise buildings.

Assessment:
Written, oral and graphic communication. Assessment will be based on two components: Component A, the realisation and communication of architectural ideas in response to a design situation; Component B, the technical description and justification of the architectural design. Students must pass both components to pass the course.

ARCH-65xx ARCHITECTURE ELECTIVE STUDIO 10.0

Contact Hours
up to 18 hours of lectures, tutorials, workshops, seminars and studio sessions per week. Actual hours may vary from week to week.

Content
This course explores selected aspects of design in architecture that allow students to learn from the particular expertise of the Instructor(s). Possible topics change each year depending on the availability of instructors. The focus may include some of the following design, cultural and technical topics and issues: design exploration, form generation, heritage and adaptation of existing buildings or design for overseas locations. It may also be used by students to undertake architectural competitions.

Assessment:
Written, oral and graphic communication. Assessment will be based on two components: Component A, the realisation and communication of architectural ideas in response to a design situation; Component B, the technical description and justification of the architectural design. Students must pass both components to pass the course.

You are responsible for your own education. What you gain out of university education is proportional to the effort and time you put into it. While you expect, and are entitled to the best from academic faculty, they will also expect the best out of you. Your responsibilities as a student in the Faculty include:
• respecting class times;
• adhering to course and submission times and schedules;
• preparing for courses by completing assignments and readings and participating in academic discourse;
• being open-minded about criticism and engage in discourse and debate with your peers and faculty;
• respecting differences in values, background, and interests of other students and faculty;
• communicating problems, concerns, and positive actions as appropriate;
• participating in extra-curricular activities and your surroundings.

Academic faculty are responsible for educating, inspiring and mentoring students. They are expected to bring their full passion and experience to class and provide attention to individual students. In return, academic faculty will require academic dedication and critical attention and participation in academic discourse from their students. The responsibility of academic faculty include:
• respecting class times;
• leading by example;
• providing course outlines and timetables at the beginning of the semester;
• providing feedback to work submitted at the stipulated time;
• communicating goals, expectations, and deadlines at the beginning of the semester and as they change throughout the course;
• engaging in life long learning and continuing education, as well as facilitate debate and discussion;
• respecting differences in values, background, and interests of students and other faculty.

Students are expected to: attend class regularly; take assessment exercises as determined by Course Instructors; participate in group work exercises, and; submit
projects and assignments by the specified times. Course Instructors are not obliged to accept work submitted past the due date, or to grant extensions. **Students have no automatic right to re-submit projects and assignments or to re-take tests.**

Mobiles phones must be turned off, or on silent mode during lectures, tutorials, and seminar sessions. Failure to do so may result in the devices being confiscated.

Students absent from class for more than three consecutive days, students who are sick, or students who need to be absent from the University for valid reasons should inform the Faculty Administrator at the earliest possible opportunity.

Students, who fail to meet with their assigned Studio Tutor at least once a week during the semester without a valid reason, may be barred from presenting themselves for final assessment. They will be regarded as having failed the continuous assessment component of the course, and will be required to repeat the course when next offered.

As some courses in the Faculty are given in blocks; students who miss a substantial part, or the entire course will not be permitted to undertake the final assessment exercises for these courses.

All students are reminded that Uganda Martyrs University upholds a policy of non-discrimination, particularly on the grounds of social status, sex, race, tribe, religion, or disability. Students who do not comply with this university policy may face disciplinary action.

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**core courses**

All courses are fundamental to the integrity of academic programmes in the Faculty. Consequently, students are expected to successfully complete all prescribed courses in their programme of study. Under exceptional circumstances, candidates may, upon application, be granted exemption from some courses in the first or second year of the undergraduate programme, or the first year of the graduate programmes. This is on the basis of previous studies undertaken, and granted based on recommendation of the Associate Dean (Academic Affairs and Research) to Faculty Board. Candidates who have been granted exemption may be required to take elective courses in lieu of these. Note, exemptions will generally not be granted for any final year courses.

Electives are occasionally offered by the Faculty through the ‘Special Topics in Design’ course series. Special Topics courses offer students an opportunity to undertake work that relates to a particular area of interest. Students may also undertake courses from other faculties in lieu of a Special Topics course. Note, elective course units count towards the final graduation credit requirements and students must complete a minimum number of elective credits to be eligible to graduate.

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**LEVEL I**

**ARCH-6101 ARCHITECTURE STUDIO A**

**Environmental Design / User Needs**

**Contact Hours**

up to 18 hours of lectures, tutorials, workshops, seminars and studio sessions per week. Actual hours may vary from week to week.

**Content**

This course typically focuses on the design of a dwelling (or group of dwellings) on a real site, with a particular owner-occupier as client. Students will be required to develop a brief from the client’s instructions and develop design options that respond to the brief, the site and environmental objectives. Theory and practice regarding a range of aspects of low-rise domestic construction (including site preparation, footings and foundations, super structure) will be applied. Students will be expected to explore sources and precedents of their designs to be able to explain design intentions and communicate the architectural intentions of the building design, and to demonstrate that they understand its potential construction and performance through analysis of the potential performance of the chosen design. Technical requirements will include an emphasis on the lighting and environmental performance, in the context of the client’s requirements and the development of a set of construction specifications and drawings. The analysis and documentation will be carried out using digital media. Lectures, tutorials and seminars given in the course will complement the design process, addressing the topics outlined above.

**Assessment:**

Written, oral and graphic communication. Assessment will be based on two components: Component A, the realisation and communication of architectural ideas in response to a design situation; Component B, the technical description and justification of the architectural design. Students must pass both components to pass the course.

**ARCH-6121 LANDSCAPE ARCHITECTURE STUDIO**

**Contact Hours**

up to 18 hours of lectures, tutorials, workshops, seminars and studio sessions per week. Actual hours may vary from week to week.

**Content**

This course addresses the theory and practice of Landscape Architecture / Urban Design and its expression in different kinds of projects, including, but not limited to: ‘hard landscape’ urban projects such as a square or street; and large-scale elements in the urban landscape such as a footbridge or shade structure. Projects are developed from conceptual levels to outline construction strategies and details. Design processes and presentation emphasise the role of digital media in urban
syllabus

LEVEL 0

ARCH-0101 PROFESSIONAL PRACTICE I

Contact Hours
up to 28 hours of lectures, workshops and seminars (May be given as a block course).

Description
This course places students in architectural practices as active participants in the making of architecture. As part of their placement, students are expected to be involved in the various aspects of office practice from administration through to project development and management. This professional placement is coupled with formal sessions with Instructors. Students are expected to observe and participate in the various aspects of architectural practice and to keep a formal logbook and work diary. During formal instruction sessions, students will explore among many things, the practice of architecture as it relates to aspects of various Building Codes, and the Architect’s Code of Conduct. Students will be expected to discuss their experiences and make at least one oral presentation about one or more aspects of their experiences.

Assessment
Attendance and participation in seminars and workshops. Log book. Written report signed by a registered Architect employing the student.

ARCH-0202 PROFESSIONAL PRACTICE II

Contact Hours
up to 28 hours of lectures, workshops and seminars (May be given as a block course).

Description
This course is a continuation of ARCH-0101 Professional Practice I. It places students in architectural practices as active participants in the making of architecture. As part of their placement, students are expected to be involved in the various aspects of office practice from administration to project development and management. This professional placement is coupled with formal sessions with Instructors. Students are expected to observe and participate in the various aspects of architectural practice and to keep a formal logbook and work diary. During formal instruction sessions, students will explore among many things, the practice of architecture and the relationships between the Design Professional, Client, Contractor and Subcontractor. It will also look at the obligations and legal aspects of these relationships. Students will be expected to discuss their experiences and make at least one oral presentation about one or more aspects of their experiences.

Assessment
Attendance and participation in seminars and workshops. Log book. Written report signed by a registered Architect employing the student.

course sequence

Courses in the undergraduate programmes build upon one another. The sequence in which they are undertaken is therefore extremely important. Unless unusual circumstances warrant it, all course prerequisites must be taken prior to enrolling in a subsequent course and cannot be carried into subsequent years. Check the course listings in this handbook and individual course syllabi for specific prerequisites.

assessment and examinations

Registering for a course is also a commitment to submit assignments and to sit any prescribed tests or examinations. Failure to meet assignment submission deadlines without prior permission, or failure to attend a test or examination may result in severe penalties, including failure of a course. Students must sit examinations on the scheduled date and time. Misreading of the university almanac or the examination timetable is not accepted as grounds for failure to sit an examination. At the beginning of each course, the Course Coordinator will provide details of assessment tasks, due dates and assessment procedures.

degree programme and course changes

The University and Faculty reserve the right to modify or change the title of its degree programmes and courses, or modify, change or discontinue courses and curricula as a result of reorganisation and changing circumstances. If a programme is eliminated in its entirety, or if required courses are eliminated from a particular programme, the Faculty reserves the right to offer substitute courses as deemed appropriate. Professional registration and certification requirements may necessitate revisions to graduation requirements and course content from time to time. Under these circumstances, students may be required to fulfil the revised requirements as stipulated by the professional organisations.

grievances

Students who feel they have a grievance against or have been unfairly treated by a member of the University Staff, should in the first instance outline the nature of their complaint to that member of staff, and in writing to the Dean of the Faculty, who may then refer the matter to the Registrar. Students who are victims of sexual or any other forms of harassment are advised to consult with the Dean of Students. All details of such complaints will be kept strictly confidential.

hiv/aids and anti-sexual harassment policy

The Uganda Martyrs University has a HIV/AIDS and Anti-Sexual Harassment Policy. All students should make themselves familiar with this policy.
research

The Faculty of the Built Environment is a multidisciplinary faculty, with diverse interests. Within this setting, research is a key part of the mandate of the faculty, and a core component of architectural education and practice. Research also acknowledged that the discipline of architecture is simultaneously a process, a product, and performance evaluation, which yields a number of research fields, which for the faculty can be categorised into the following broad range of themes:

- Environmental and Sustainable Design
- Architecture and Culture
- Colonial and Post Colonial Architecture
- Urban and Regional Planning / Cultural Landscapes
- Materials and Material Performance

Each of these disciplines is under the leadership of a senior academic staff member, who is involved with research on this topic, teaches in this area, and supervises research students undertaking research within the specified fields. Note, these are not academic departments, but areas of research interest. It is up to individual students to take an interest in a particular group or groups.

undergraduate research

To ensure all undergraduate students are made familiar with the intricacies of research, most courses in the faculty and embedded in all courses across the various programmes. Key research components identified and addressed through the programme include:

research frameworks

- Interpretative
- Constructivist
- Emancipatory
- Positivism
- Post positivism

research strategies and approaches

- Interpretive-historical
- Logical argument
- Correlational
- Qualitative
- Quantitative
- Simulation and modelling
- Experimental
- Case studies
- Combined strategies

Each of the courses conducted by the faculty address at least one of these components as an integral part of the study programme, and will be indicated as part of the course.

course schedule

LEVEL 0

<table>
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<tr>
<th>Course Code</th>
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<th>Hrs/Wk</th>
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<td>ARCH-0212</td>
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LEVEL I

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<td>ARCH-65xx</td>
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LEVEL II

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<td>ARCH-7113</td>
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and either

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<th>Credits</th>
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or

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<th>Hrs/Wk</th>
<th>Credits</th>
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<td>ARCH-7262</td>
<td>Architecture Masters Thesis B</td>
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</tbody>
</table>
degree of master of architecture (professional)

The curriculum of the Master of Architecture (Professional) (M.Arch.(Prof.)) shall extend over not less than two years of full-time study or four years of part-time study and not more than four years in all cases. Successful completion of a minimum of 80 course units makes a student eligible for the award of the degree of Master of Architecture (Professional) of Uganda Martyrs University.

Studio courses at Level I in the M.Arch.(Prof.) programme will be conducted as eight-week modules (including final presentation). Studio courses at Level II will be conducted as 14-week modules (including final presentation). Students must complete all required tasks within that period of time. It is therefore important that students come prepared to work expediently from the first day, and consistently thereafter, otherwise they will fall behind.

To be eligible for the award of the degree of Master of Architecture (Professional), a candidate:

1. shall comply with the General Regulations of the Faculty and University; and;
2. shall follow courses of instruction and complete, satisfactorily, all prescribed work;
3. shall complete the curriculum and satisfy the examiners in accordance with the regulations and syllabuses set out in this document.

graduate research

All graduate level research students should endeavour to align themselves with one of the research themes of the faculty. Research topics should be selected keeping in mind these areas of research interest. Within these themes, research students are expected to make public presentations of their research during the annual research symposium hosted by the faculty.
All fees must be paid in full prior to the beginning of Week 8 of each Semester. Students who have not paid fees prior to this date, without a valid reason, are required to vacate the campus and not return until all dues are settled. Students in this category may apply for special examinations as their final assessment.

All students who have to take special/supplementary assessment will be required to pay a supplementary assessment fee that is determined on an annual basis by the Faculty in conjunction with the Finance Office. Note: Due to the nature of teaching and assessment in the Faculty, supplementary assessment in studio-based courses – when offered - are substantially higher than those of other courses. For the 2016/17 Academic Year, these are set at UGX 250,000 for each studio course for which they have been offered supplementary assessment.

A student, who withdraws from the University or is discontinued from studies, is required to settle all outstanding fees with the Finance Department and may be required to return his/her identity card to the Registrar’s Office.

Students who have outstanding fees at the end of the academic year will not receive assessment results until all accounts are paid in full.

Before a degree can be awarded, students are required to have settled all outstanding debts with the university.

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**Honours**

**LEVEL III - SEMESTER I and II**

**ENDS-3601 ADVANCED STUDIES IN DESIGN**

**4.0**

**Contact Hours**

up to 4 hours of tutorials/seminars per week

**Prerequisite**

Approval by the Faculty

**Description**

This Honours stream provides eligible students with the opportunity to conduct an in-depth study in an area of interest. The aim of the course is to equip students with skills for the critical analysis of topics related to the built environment, thus contributing to scholarship on the built environment and laying a foundation for future research. With the assistance of their supervisors, students will develop skills in data gathering and analysis, and the development and presentation of research papers relevant to their particular topic, and prepare a dissertation of between 5,000 and 8,000 words on a topic of interest. The research topic must be approved by the Course-Coordinator in conjunction with the proposed supervisor and the student. In addition to the written dissertation, which must be a piece of academic writing incorporating relevant illustrations and references, students will be required to make a formal presentation of their findings in an open seminar session organised by the Faculty.

**Assessment**

Dissertation 80%, seminar presentation 20%
## Assessment

Assignments/projects 100%

### ENDS-3511 SPECIAL TOPICS IN DESIGN IIIL (ELECTIVE) 1.5

#### Contact Hours

Up to 2 hours of lectures/tutorials/seminars per week

#### Prerequisite

None

#### Description

Available Courses and Course description will be provided by the Faculty.

#### Assessment

Assignments/projects 100%

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## Prizes and Scholarships

### Course Awards and Scholarships

The Faculty occasionally offers scholarships and prizes to eligible students and graduates. The following are the current Awards and Prizes offered by the Faculty.

#### Scholarships

**The Dubrey Trust Scholarship** is awarded to a needy student in the second year of the Bachelor of Environmental Design (B.Envi.Des.). This scholarship is advertised annually and students seeking assistance should make a formal application to the Uganda Martyrs University Scholarship Committee through the Dean of the Faculty. The scholarship is renewable for the final year of the B.Envi.Des. programme if the recipient passes all courses in the second year of the programme.

#### Graduation Prizes

**The Firmin Mees Award in Environmental Design** is presented annually to the top ranked graduating student from the Honours Bachelor of Environmental Design (B.Envi.Des.(Hons.)). The student will receive a Certificate and a Monetary Award. To be eligible, students should have a weighted average of 65% (GPA of 3.5/5.0) or higher in the B.Envi.Des.(Hons.) programme.

**The Michel Lejeune Award in Architecture** is presented annually to the top ranked graduating student in the Master of Architecture (Professional) (M.Arch.(Prof.)). The student will receive a Certificate and a Monetary Award. To be eligible, students should have a weighted average of 65% (GPA of 3.5/5.0) or higher in the M.Arch. (Prof.) programme.

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## Attendance and Grading Policies

### Assessment

Students are expected to attend lectures, tutorials, seminars, practical and studio sessions as specified in course outlines. Lectures, tutorials and other classes will proceed on the assumption that students have done so. Students should note that attendance at tutorials, seminars, studio and other practical sessions is taken into account in any decision to offer supplementary assessments and for eligibility to sit examinations. Students who fail to attend these sessions or do not carry out the associated work may be precluded from final assessment tasks and will be regarded as having failed the continuous assessment component of the course. Note, a proportion of marks for courses may depend on contributions in tutorials and seminars.
A variety of assessment methods are used in the Faculty of the Built Environment, with a substantial part of tasks based on progress and development of ideas. As such, for most courses in the Faculty, significant attention and weight is placed on continuous assessment during the semester. Continuous assessment exercises may include projects, assignments, tests, seminar presentations, informal discussions etc. Students who fail to keep up with their coursework will find it difficult to complete the required tasks in time, and will likely not pass their courses. Block courses may be assessed as soon as they are completed.

Evaluations for studio and project work are not only based on the quality of the work, but also on the ability to complete the work within the allotted time. Late work will generally NOT be accepted, and will automatically receive a mark of “0”. Only in exceptional circumstances will late work be accepted, and at the discretion of the Course Instructor. Should a project be delayed by illness or other serious problems outside a student's control, these will be taken into account. However, students should make sure that they discuss the details with the Course Instructors and obtain the necessary medical certificates. (See section on Compassionate and Medical supplementary examinations)

Students are deemed to have successfully completed a course if they received a final mark of 50% and have passed both the technical and design components, and/or both continuous assessment and final assessment components of a course. Specific criteria are noted on Course Outlines. A student cannot increase their final mark by taking a course again.

Outline of Grades
Evaluation of student work is a matter of professional judgment by academic faculty based upon grading criteria and grading processes established within Faculty guidelines. Grades are generally determined by four factors depending on the focus of the particular course:

- performance on projects and exercises (up to 70%)
- expression, spelling and grammar (up to 20%)
- participation in class discussions, juries, presentations (up to 20%)
- attendance/ability to meet deadlines (up to 20%)

An outline of the grading system used in the Faculty of the Built Environment is presented below:

90 – 100% Exceptional Work (A+)
The development and communication of the project shows an in-depth understanding and resolution of the project requirements and goals.

80 – 89% Excellent Work (A)
The development and communication of the project shows a significant depth of understanding and resolution of the project requirements and goals.

Assessment
assignments/projects 60%, examination 40%

BET-3201 BUSINESS ETHICS 2.0
Contact Hours
up to 3 hours of lectures/tutorials/seminars per week
Prerequisite
None
Description
The course is designed to help students think about the ethical choices they make and will have to make in their professional lives. In addition to the notions of right or wrong, and good or bad, human conduct in a business context is also faced with a number of ethical dilemmas. This course is a propaedeutic process of learning one's way through an informed critical and realistic understanding of the problem of business and economic benefits on one-hand, and social and moral values on the other. The goal of this inquiry is to enable students to know what values are, why they are important and how they influence our moral and economic judgments. Topics covered include: Business Ethics; Traditional approaches to business ethics; Values in Business; The African view of business; Effective integration of corporate and social values; Business and social responsibility. Students will be required to, individually and in groups, identify problem areas, study them and make proposals to be identified as problems/challenges.

Assessment
assignments/projects 50%, examination 50%

Plus a Minimum of 3 Credits from the following Electives, or an approved Course from another Faculty

ENDS-3505 SPECIAL TOPICS IN DESIGN IIIE (ELECTIVE) 3.0
ENDS-3506 SPECIAL TOPICS IN DESIGN IIIF (ELECTIVE) 3.0
ENDS-3507 SPECIAL TOPICS IN DESIGN IIIG (ELECTIVE) 3.0
ENDS-3508 SPECIAL TOPICS IN DESIGN IIIH (ELECTIVE) 3.0
Contact Hours
up to 4 hours of lectures/tutorials/seminars per week
Prerequisite
None
Description
Available Courses and Course description will be provided by the Faculty.
Landscape Architecture Stream (Not Offered in 2016/17)  
LEVEL III - SEMESTER II

ENDS-3273  LANDSCAPE DESIGN STUDIO  
10.0

Contact Hours
up to 10 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
This course focuses on the exploration of contemporary landscape architecture theories and their application to the design and development of medium to large-scale landscape project(s). Emphasis will be placed on development of brief, process, and program; developing design to respond to the user needs assessed through community consultation and to local environments by taking into consideration topography, vegetation, soil/geology, hydrology and climatology; developing appropriate structure and construction details for the planting and hard-scape design as well as irrigation systems; applying night lighting where appropriate; performing life-cycle cost analysis; building codes & regulation; and presenting design work with manual/hand and digital drawing and physical modelling using the conventions in representation as well as using innovative digital techniques.

Assessment
assignments/projects 100%

ENDS-3245  DESIGN AND CONSTRUCTION TECHNOLOGIES V  
7.0

Contact Hours
up to 8 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
This course focuses on the exploration of contemporary building systems and technologies and their application to the detailed design and development of medium to large-scale construction project(s).

Structures (Design II) (50%): Slabs (one- and two-way slabs supported by beams or walls – two-way flat slabs directly supported by columns) – stairs (basic design rules – balancing – calculation of straight flights) – foundations (wall-strip foundation – column footing – foundation strip under column row – foundation raft)

Construction (50%): Emphasis will be placed on development of brief, process, and program; developing appropriate structure and construction details for the development of appropriate structural and construction systems as appropriate; performing life-cycle cost analysis; and presenting design work with manual/hand and digital drawing and physical modelling using the conventions in representation as well as using innovative digital techniques.

65 – 79% Very Good Work (C+, B, B+)
The development and communication of the project shows a good depth of understanding and resolution of the project requirements and goals. The project achieves qualities beyond minimum standards. It has overall merit and commendable qualities without major deficiencies.

55 – 64% Good Work (D+, C)
The development and communication of the project shows an adequate depth of understanding and resolution of the project requirements and goals. The project achieves minimum standards or shows significant positive qualities to counter balance unresolved or poorly resolved areas.

50 – 54% Satisfactory Work (D)
Flaws exist in the development and communication of the project indicating a weak understanding and resolution of project requirements and goals.

48 – 49% Marginal Work - Compensatable (F)
Many flaws exist in the development and communication of the project indicating a poor understanding and resolution of project requirements and goals.

0 – 47% Unacceptable Work (F)
Does not meet minimum standards of understanding, development, and communication of the project and goals.

Student grades on official documentation will be presented with a Letter Grade and the Grade Point. The equivalent bands are presented below:

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<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
<th>Point</th>
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<td>A+</td>
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<tr>
<td>80.0% - 89.9%</td>
<td>A</td>
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<td>75.0% - 79.9%</td>
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<td>70.0% - 74.9%</td>
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</table>

Incomplete grade
The Faculty may award an Incomplete (I) grade if for unpredictable reasons (such as illness) a student is unable to finalise work for a course. This is subject to the work already completed being of a passing grade. Students attaining an Incomplete grade, must make provisions with the Course Co-ordinator in charge of the course to make up the missed work. The work must be made up before the end of the second semester (for first semester courses) or before the beginning of the supplementary assessment week in August (for second semester subjects).

Withheld
The Faculty at times withholds marks pending the submission of subsequent projects or assignments. The final mark will be released upon the submission of this work.
Courses offered by the Faculty are predominantly assessed based on work carried out in *non-contact time* and ‘due’ at or before a specified time on a specified day. As in submitting design competition entries, or indeed any design proposals in a professional capacity, deadlines are absolute and non-negotiable. It is the responsibility of the student to be aware of, and keep track of submission times, and adhere to them. Late submissions will only be accepted on grounds of Medical or Compassionate grounds (*with documented evidence*), or with prior approval of the Course Instructor. In all cases approval must be given at least 24 before the stipulated due date (*Also see section on Supplementary Assessment*).

All submissions must be made to the Faculty Office before 4:00pm on the due date, unless otherwise specified. Under no circumstances is work to be submitted directly to Course Instructors. This is to minimise the chance of work getting lost, or disputes about submissions. Students will be required to complete and attach a signed Assignment Cover Sheet to each submission. Work submitted without a signed and dated cover sheet will not be assessed. In certain cases, submissions may be accepted via ‘electronic’ means. Where this is the case, these submissions are treated the same as work submitted physically, with the time due evident when the file is emailed, or uploaded. In all cases, work submitted must be received by the due date and time in the stipulated format as specified in the Course Outline or Assignment Sheet, i.e. files in a print queue will be considered late as they have not been received in the stated format (printed) before the due date and time.

Where work is assessed in class or studio sessions, the start time for the class or session will be regarded as the ‘deadline’ for the work. In this case, there is no opportunity for a ‘late submission’ so the assigned mark will be zero unless there are medical or extenuating circumstances which justify the absence.

Students experiencing medical problems should make a written Application for Assessment on Medical Grounds or those with extenuating circumstances should make an Application for Consideration of Extenuating Circumstances. *Note:* Documented evidence must be provided.

Where work is carried out in groups (two or more students collaborating on an assignment), the work should be submitted on time, unless both/all the members of the group experience medical or personal problems or, unless other arrangements have been made in advance with the Course Coordinator or Course Instructor for a later submission due to the inability of all members of the group to fully contribute to the work. The circumstances that have affected the work of the group should be described in detail in an attached report. The work will be marked, taking the circumstances into account, or returned to the group for completion and a new ‘due date’ fixed by the Course Instructor. Depending on the circumstances, the group may be eligible for Assessment on grounds of Medical or Extenuating Circumstances, and/or a Medical or Compassionate supplementary assessment.

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**ENDS-3511**  SPECIAL TOPICS IN DESIGN IIIL (ELECTIVE)  1.5

**Contact Hours**
up to 2 hours of lectures/tutorials/seminars per week

**Prerequisite**
None

**Description**
Available Courses and Course description will be provided by the Faculty.

**Assessment**
assignments/projects 100%

**ENDS-3512**  SPECIAL TOPICS IN DESIGN IIIM (ELECTIVE)  1.5
BET-3201  BUSINESS ETHICS  2.0

Contact Hours
up to 3 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
The course is designed to help students think about the ethical choices they make and will have to make in their professional lives. In addition to the notions of right or wrong, and good or bad, human conduct in a business context is also faced with a number of ethical dilemmas. This course is a propaedeutic process of learning one's way through an informed critical and realistic understanding of the problem of business and economic benefits on one-hand, and social and moral values on the other. The goal of this inquiry is to enable students to know what values are, why they are important and how they influence our moral and economic judgments.

Topics covered include: Business Ethics; Traditional approaches to business ethics; Values in Business; The African view of business; Effective integration of corporate and social values; Business and social responsibility. Students will be required to, individually and in groups, identify problem areas, study them and make proposals to be identified as problems/challenges.

Assessment
assignments/projects 50%, examination 50%

Plus a Minimum of 3 Credits from the following Electives, or an approved Course from another Faculty

ENDS-3505 SPECIAL TOPICS IN DESIGN IIIE (ELECTIVE)  3.0
ENDS-3506 SPECIAL TOPICS IN DESIGN IIIF (ELECTIVE)  3.0
ENDS-3507 SPECIAL TOPICS IN DESIGN IIIG (ELECTIVE)  3.0
ENDS-3508 SPECIAL TOPICS IN DESIGN IIH (ELECTIVE)  3.0

Contact Hours
up to 4 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
Available Courses and Course description will be provided by the Faculty.

Assessment
assignments/projects 100%

Students may be offered the opportunity to RESUBMIT any assignment for which they have received a Fail for consideration for a grade of up to 50% of the original assignment total. This applies to all assessment exercises that were submitted on time and received a fail grade (F). The date for resubmission of assignments will be by 4pm on the Friday of Reading Week. Note: acceptance of resubmitted work is at the discretion of the Course Co-ordinators. Due to deadlines for final marking, and publication of end-of-semester results, the re-submission policy will not apply to FINAL assignments. Only students, who have been expressly informed that they are to resubmit work, will be permitted to do so.

return of work
Assignments submitted ‘on time’, will be returned fairly promptly (normally within one - two weeks) and with feedback comments as well as a grade. Students may discuss their performance with the relevant Course Coordinator or Course Instructor. Note: Course Instructors are under no obligation to provide feedback for work that has been submitted late.

The Faculty retains a certain proportion of representative student work for record and exhibition purposes as well as for Validation purposes to the Commonwealth Association of Architects (CAA), the International Federation of Landscape Architects (IFLA), the Uganda Society of Architects (USA) or other relevant accreditation bodies. Course Co-ordinators will notify students if their work is to be retained.

collection of work
Semester I Work: Work for collection after the end of the Semester I will be placed in the Studio. This work must be collected before the end of the first week of Semester II. After this date, due to lack of storage space, this work will be removed and disposed of.

Semester II Work: Work for collection after the end of the Semester II will be placed in the Studio. It will be available for collection until the first week of Semester I of the following academic year. After this date, due to lack of storage space, this work will be removed and disposed of.

course evaluations
Near the end of each Semester, the Faculty and University administer surveys: the Student Evaluation of Learning and Teaching (SELT). These evaluations are important for the development and improvement of Teaching and Learning in the Faculty, and should be completed diligently. SELTs are a mandatory requirement for all students, and for all courses.
supplementary assessment

Supplementary assessment is awarded to students who meet the prescribed requirement as detailed below. This is at the discretion of the Faculty Board and is not automatic. For studio courses, students will generally not be considered for supplementary assessment, and will be required to repeat the failed course when next offered.

conceded passes

Students who have passed all of their courses except for one in a Semester, in which they have received 48% - 49%, may be awarded a CONCEDED PASS. Such students will have attendance, general participation in courses and class-work taken into consideration. The mark on the transcript in this case will read 50%.

academic supplementary examinations

Students who receive a primary result of 35% - 49% in general courses (45%-49% for studio courses) may, according to Faculty policy, be offered a supplementary examination or an opportunity to submit supplementary assignments. To pass the said courses, the student must receive at least 50% in the supplementary examinations. The final mark achieved in the supplementary examination will be recorded, with an (S) after it.

academic supplementary examinations in studio based courses

As most courses in the Faculty are based around integrated design projects, Supplementary Assessment is offered on a discretionary basis. The resubmission policy described under submission policy, is designed to allow students to increase their understanding during the semester, and therefore improve their academic standing. Supplementary Assessment, as such, will only be offered under exceptional circumstances and on recommendation of the Course Coordinator and Course Instructors to Faculty Board. Students should also read Faculty Submission Policy as it relates to supplementary assessment.

compassionate and medical supplementary examinations (special exams)

Students who fall sick during the final assessment period or who are prevented from doing any final assessment exercises by a medical condition or other reason deemed to be significant, will be awarded Medical or Compassionate Supplementary Assessments (as appropriate) in the course(s) affected at the discretion of the Faculty Board. Students in this category must have documentation from an approved medical officer or the Dean of Students verifying the extenuating circumstances.
**Assessment**
assignments/projects 100%

**ENDS-3511** SPECIAL TOPICS IN DESIGN III (ELECTIVE) 1.5

**ENDS-3512** SPECIAL TOPICS IN DESIGN IIIM (ELECTIVE) 1.5

**Contact Hours**
up to 2 hours of lectures/tutorials/seminars per week

**Prerequisite**
None

**Description**
Available Courses and Course description will be provided by the Faculty.

**Assessment**
assignments/projects 100%
Note: due to the nature of instruction in studio based courses, Supplementary Assessment cannot be offered in most instances. Students failing these courses will generally be required to repeat the course when it is next offered.

A candidate required to repeat a year shall NOT NORMALLY be permitted to undertake courses already passed with a grade of 60% and above. Students may take, with approval, additional courses from other Faculties or Institutes of the university to make up a full time study load.

**discontinuation**

A first or second year student of programmes in the faculty shall normally be required to discontinue their studies if they fail more than 50% of courses at a first attempt in a particular academic year without any valid reason. Students who are close to the 50% threshold after the first semester may be required to discontinue their studies at that stage. A student may also be discontinued if they fail to satisfy the examiners in a supplementary examination of a course they are repeating.

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**honours degrees**

The purpose of a Bachelor Honours Degree qualification is to enable students to demonstrate awareness of the application of knowledge in a specific context, and to gain a higher level of learning to prepare them to undertake professional programmes and/or higher-level research. A Bachelor Honours Degree goes beyond the ordinary bachelors qualification, showcasing the development of advanced knowledge through evident research contained in a substantial project or dissertation during the final year of study. Bachelor Honours Degree is thus gained from a demonstration and evidence of higher level learning. Graduates of a Bachelor Honours Degree are expected to have advanced knowledge and skills necessary for professional work as well as further educational endeavours.

All students entering the Bachelor of Environmental Design programme are automatically enrolled in the Ordinary Degree. Entry into the Honours stream is subject to students achieving a cumulative weighted average of 60% (CGPA of 3.0) or higher in the first and second year of the Bachelor of Environmental Design programme. Students in this category will be invited to apply to the Honours stream in the final year of their studies.

Students in the Honours stream take the research based seminar course: ENDS-3601 Advanced Studies in Design. In this course, students undertake structured research under the supervision of a member of staff. Students must pass this course as well as the other final year subjects with an average passing grade of 60% to be awarded the Honours Degree of the Bachelor of Environmental Design.

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**Assessment**

assignments/projects 60%, examination 40%

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**BET-3201 BUSINESS ETHICS**

<table>
<thead>
<tr>
<th>Contact Hours</th>
<th>up to 3 hours of lectures/tutorials/seminars per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite</td>
<td>None</td>
</tr>
</tbody>
</table>

**Description**

The course is designed to help students think about the ethical choices they make and will have to make in their professional lives. In addition to the notions of right or wrong, and good or bad, human conduct in a business context is also faced with a number of ethical dilemmas. This course is a propaedeutic process of learning one's way through an informed critical and realistic understanding of the problem of business and economic benefits on one-hand, and social and moral values on the other. The goal of this inquiry is to enable students to know what values are, why they are important and how they influence our moral and economic judgments. Topics covered include: Business Ethics; Traditional approaches to business ethics; Values in Business; The African view of business; Effective integration of corporate and social values; Business and social responsibility. Students will be required to, individually and in groups, identify problem areas, study them and make proposals to be identified as problems/challenges.

**Assessment**

assignments/projects 50%, examination 50%

Plus a Minimum of 3 Credits from the following Electives, or an approved Course from another Faculty

**ENDS-3505 SPECIAL TOPICS IN DESIGN IIIE (ELECTIVE)**

<table>
<thead>
<tr>
<th>Contact Hours</th>
<th>up to 4 hours of lectures/tutorials/seminars per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite</td>
<td>None</td>
</tr>
</tbody>
</table>

**Description**

Available Courses and Course description will be provided by the Faculty.
Architecture Stream

LEVEL III - SEMESTER II

ENDS-3271 ARCHITECTURE DESIGN PROJECT 10.0

Contact Hours
up to 10 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
This course focuses on the exploration of contemporary architecture theories and their application to the design and development of medium scale building project(s). Emphasis will be placed on development of brief and program; developing design to respond to the local environments with the application ‘passive’ design principles, natural and artificial lighting, and building ergonomics; selecting building materials suitable for the construction; developing construction details; sizing of the structural elements; performing life-cycle cost analysis; building regulations and building codes (particularly in relation to Access and Egress as well as Health and Safety.) and presenting design work with manual/hand and digital drawing and physical modelling using the conventions in representation as well as using innovative digital techniques.

Assessment
assignments/projects 100%

ENDS-3245 DESIGN AND CONSTRUCTION TECHNOLOGIES V 7.0

Contact Hours
up to 8 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
This course focuses on the exploration of contemporary building systems and technologies and their application to the detailed design and development of medium to large-scale construction project(s).

Structures (Design II) (50%): Slabs (one- and two-way slabs supported by beams or walls – two-way flat slabs directly supported by columns) – stairs (basic design rules – balancing – calculation of straight flights) – foundations (wall-strip foundation – column footing – foundation strip under column row – foundation raft)

Construction (50%): Emphasis will be placed on development of brief, process, and program; developing appropriate structure and construction details for the development of appropriate structural and construction systems as appropriate; performing life-cycle cost analysis; and presenting design work with manual/hand and digital drawing and physical modelling using the conventions in representation as well as using innovative digital techniques.

The final classification of the Honours degree is awarded based on performance in the course ENDS-3601 Advanced Studies in Design and other courses in the undergraduate programme. In determining the final grade of Honours, the final honours mark will be determined based on the following: Year I – 15%; Year II – 25%, and; Year III – 45%. The course ENDS-3601 Advanced Studies in Design, shall account for 15% of the final year honours grade.

The Honours degree of Bachelor of Environmental Design shall be classified as follows:

class of degree

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Honours Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Class Honours (Hons. I)</td>
<td>80% +</td>
<td>5.00 +</td>
</tr>
<tr>
<td>Second Class Honours (Upper) (Hons. IIA)</td>
<td>70% - 79%</td>
<td>4.00 – 4.99</td>
</tr>
<tr>
<td>Second Class Honours (Lower) (Hons. IIB)</td>
<td>60% - 69%</td>
<td>3.00 – 3.99</td>
</tr>
<tr>
<td>Pass/Ordinary</td>
<td>50% - 59%</td>
<td>2.00 – 2.99</td>
</tr>
</tbody>
</table>

masters degree classification

The final classification of the Masters degree is based on performance in the research course and other courses. In determining the final classification, the research courses (ARCH-7151/ARCH-7252 or ARCH-7161/ARCH-7262) shall account for 20% of the final grade. The degree of Master of Architecture shall be classified as follows:

class of degree

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Arrow Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distinction</td>
<td>75% +</td>
<td>4.50 +</td>
</tr>
<tr>
<td>Credit</td>
<td>65% - 74%</td>
<td>3.50 – 4.49</td>
</tr>
<tr>
<td>Pass</td>
<td>50% - 64%</td>
<td>2.00 – 3.49</td>
</tr>
</tbody>
</table>

cheating and plagiarism

Students of the Uganda Martyrs University are expected to follow the rules of academic honesty. To assure the validity of the learning experience, the university sets clear standards for student work. In any presentation, creative, artistic, or research, it is the ethical responsibility of each student to identify the conceptual sources of the work submitted. Failure to do so is dishonest and is the basis for a charge of cheating or plagiarism, which is subject to disciplinary action.
Cheating includes but is not necessarily limited to:

1) Plagiarism (as described below);
2) Submission of work that is not the student’s own;
3) Submission or use of falsified data;
4) Theft of or unauthorised access to examination material;
5) Use of an alternate, stand-in, or a proxy during an examination;
6) Use of unauthorised material in the preparation of an assignment or during an examination (as defined by the Course Instructor, and may include certain textbooks, notes, unauthorised calculators, cell phones, smartphones, PDAs, iPods, computer programmes etc).
7) Supplying or communicating in any way unauthorised information to another student during an examination.
8) Submission of the same work by two or more students unless specifically permitted or required by the Course Instructor.
9) Submission of the same work for credit in more than one course without obtaining the permission of the relevant Course Instructors beforehand.

Plagiarism includes, but is not limited to, failure to indicate the source with quotation marks or footnotes where appropriate if any of the following are reproduced in the work submitted by a student:

1) A phrase, written or musical;
2) A graphic element;
3) Specific language;
4) An idea derived from the work, published or unpublished of another person.

When a case of cheating or plagiarism is discovered, a Course Instructor may choose between simply penalising the student themselves, or reporting the plagiarism to Faculty administration, who will determine the penalty. The final decision is dependant upon the circumstances of the particular case. In general, the severity of the penalty matches the severity of the plagiarism.

1) Penalties that could be imposed by Faculty may include:
2) Lowering a student’s grade on the assignment;
3) Giving the student a failing grade on the assignment;
4) Lowering the student’s overall course grade;
5) Giving the student a failing grade in the course.

More serious cases, as well as repeat offenders, will be forwarded to the University Academic Irregularities Committee, and may result in Suspension or Dismissal from the University.

Note: the Faculty makes use of plagiarism detection software and websites to check work where cases of plagiarism are suspected. Students should ensure their work meets the accepted standards of academic honesty. As plagiarism can be inadvertent, students are encouraged to make use of free resources to check their work prior to submission.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENDS-3509</td>
<td>SPECIAL TOPICS IN DESIGN IIIJ (ELECTIVE)</td>
<td>1.5</td>
</tr>
<tr>
<td>ENDS-3510</td>
<td>SPECIAL TOPICS IN DESIGN IIK (ELECTIVE)</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Contact Hours
up to 2 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
Available Courses and Course description will be provided by the Faculty.

Assessment
assignments/projects 100%
of sound, sound transmission loss, external noise levels, structural borne and impact sound, reverberation times, selection of building envelope elements, selection of interior building materials and elements.

Assessment
assignments/projects 60%, examination 40%

ENDS-3362 FIELD EXPERIENCE II

Contact Hours
Up to 16 hours of preparatory lectures, seminars and workshops, as well as presentations during the proceeding semester.

Prerequisite
None

Description
A cooperative work experience period that involves the combined efforts of educators and employers to enable students to appreciate the relationship between architecture design, technology and the resultant site works, construction methods and materials. This course involves more than just participation in the construction process by students and should involve a critical review and reflection, related not only to previous educational experiences, but more importantly to the development of built environment professionals.

Assessment
assignments/projects 100%

Plus a Minimum of 3 Credits from the following Electives, or an approved Course from another Faculty

ENDS-3501 SPECIAL TOPICS IN DESIGN IIIA (ELECTIVE) 3.0

ENDS-3502 SPECIAL TOPICS IN DESIGN IIIB (ELECTIVE) 3.0

ENDS-3503 SPECIAL TOPICS IN DESIGN IIIC (ELECTIVE) 3.0

ENDS-3504 SPECIAL TOPICS IN DESIGN IIID (ELECTIVE) 3.0

Contact Hours
up to 4 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
Available Courses and Course description will be provided by the Faculty.

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**equipment and resources**

**equipment repair fund**

All students in the Faculty of the Built Environment are required to contribute to the faculty equipment fund, through a non refundable fee of UGX25,000 and a refundable deposit of UGX25,000 (requiring an annual payment of UGX50,000). The deposit will only be refunded if the furniture and equipment in their care, or in the room they are situated is returned in the same condition in which it was issued to them, or in which they found it. There are no exceptions for any student. Any student failing to make the payment will not be permitted to use any of the facilities in the faculty.

**studio facilities**

Studio space is the heart of the Faculty. Students in the third year of the Bachelor of Environmental Design, the Graduate Diploma in Environmental Design, as well as students in the Masters professional programmes have dedicated studio spaces for their use. Cleanliness of the studio is the responsibility of the students. At the end of each years, students are expected to leave the studio in the same condition they found it. Damage to the studio beyond regular wear and tear may warrant an assessed fee to all students using the studio space. **NOTE:** Use of spray adhesive, spray paint, and other aerosol media is forbidden in the studios, or in any teaching spaces.

**Studio Furniture**: Students in the third year of the B.Envi.Des., the Grad.Dip.(Envi. Des.), and in the graduate professional programmes will be issued with A1 or A0 drawing boards. Students are responsible for the condition of all studio furniture including, but not limited to, desks, chairs, and storage cabinets. Students must use a cutting mat when cutting on tables or the floor. Students will be charged for damage to university furniture, so be careful.

**computer facilities**

The Faculty maintains a Design Computing Suite for the exclusive use of its students. The laboratory is equipped with up-to-date hardware and software required for courses in the Faculty.

**Users**: The computer lab is for the exclusive use of the students, faculty, and staff of the Faculty of the Built Environment. All enrolled students will be given an account to access the computer pool and file server. This account will be valid through August in the year of graduation. Keys to the Computer Lab. are assigned to Year Representatives by the Dean of the Faculty. Failure to return keys at the end of each semester may result in a fine. Use of the Lab. by other students is by permission only (through the Dean). Unauthorised users should be evicted immediately. Students caught giving usernames and passwords to friends will lose their access rights to the Design Computing Suite.
Hardware: The Design Computing Suite is equipped with Intel iMac workstations running MacOSX, and connected to a MacMini Server. Workstations do not have floppy disk drives or CD drives. All students must use flash drives, external hard drives or SD Cards to transfer work on or off workstations. Under no circumstance may a desktop computer be moved within or from the Computing Suite without the express permission of the Dean and when granted, can only be carried out with the assistance of an ICT representative. Anyone doing so without permission will be banned from the Computing Suite for the remainder of the semester. Tampering with the computers in any way, including unplugging the Ethernet or power cables will result in disciplinary action.

Software: Up-to-date software including: VectorWorks (Nemetschek), FormZ and Bonzai (auto-des-sys Inc.), Photoshop, InDesign, and Illustrator (Adobe), and iWork: Pages, Numbers, Keynote (Apple) are installed on all computers. Students also have access to the iLife suite (iTunes, iMovie and iPhoto). All software used in the Design Computing Suite is legal and is to be used for educational purposes only. Students undertaking research projects may have access to specialised software as part of their courses. Details will be provided by the Course Instructors if this is the case.

Output: A black and white A3/A4 LaserWriter and a colour A4 colour LaserWriter are available in the Faculty Office for student output. An A1/A2/A3 colour plotter is also available for use by students. Printing and plotting are only available during office hours. Note: printing and plotting facilities are provided on a cost recovery basis. After hours printing and plotting as well as plots with a high proportion of ink cover, will incur an additional charge. Details are available from the Faculty Office.

General - The following general rules will apply in the Design Computing Suite:
• Eating, drinking, and smoking are forbidden; 
• Game playing is discouraged in the Design Computing Suite. Game players may be asked to give up their computer to someone needing to do work, even if other computers are available; 
• Headphones must be used for all music; 
• Loud and disruptive behaviour is not allowed; 
• Rendering that requires longer than half an hour to render should be done overnight when lab use is minimal; 
• You may only log onto one machine at a time; 
• No personal software may be installed on lab machines; 
• No personal music, movies or TV files may be uploaded on lab machines; 
• User partitions may be used for storage of personal files, which may be purged at any time. The Faculty is not responsible for any data left on the machines; 
• All problems with machines should be reported immediately to the Student Assistant in charge. The description of the problem should be precise, including the number of the machine in question, the software being used, the task being performed, etc;
• Everyone is responsible for security. Do not let unfamiliar people in the lab.;
• Making multiple prints is discouraged. Should you require multiple copies of a

LEVEL III - SEMESTER I

ENDS-3113 SUSTAINABLE BUILT ENVIRONMENTS 8.0
Contact Hours
up to 10 hours of lectures/tutorials/seminars per week
Prerequisite
None
Description
This course aims to develop, in the context of built environments, a better understanding of sustainability. Its focus is on raising awareness of the connection between human environments – both urban and rural - and environmental issues, providing an overview of sustainable issues as they relate to these environments. Various philosophical positions on sustainability will be presented and discussed, including not only ‘environmental’ but also political, resource, cultural, social, economic, institutional and professional. Building codes and regulations in relation to Energy Efficiency will also be explored.

The course will examine principles and tools for the design of sustainable environments. Students will undertake an assessment of an existing development as well as develop a <sustainable> design or redevelopment - a design project focused on the making of ‘place’.

Assessment
assignments/projects 100%

ENDS-3144 DESIGN AND CONSTRUCTION TECHNOLOGIES IV 7.0
Contact Hours
up to 8 hours of lectures/tutorials/seminars per week
Prerequisite
ENDS-3144 Design and Construction Technologies III
Description
Structures (Design I) (50%): Actions on buildings (dead –live – wind – seismic – accidental loads) – continuous beams (fundamental solution – practical calculation by 3-moment-equation and CROSS iteration) – envelopes and influence lines (bending moment, shear force, reaction) – frames (simplified methods for non-sway frames) – walls and columns (instability)
Environment (25%): Acoustics and noise control: design of rooms, basic shape and volume, acceptable ambient levels. Acoustic performance: properties and behaviour
Assessment
assignments/projects 50%, examination 50%

Plus a Minimum of 3 Credits from the following Electives, or an approved Course from another Faculty

ENDS-2505 SPECIAL TOPICS IN DESIGN IIE (ELECTIVE) 3.0
ENDS-2506 SPECIAL TOPICS IN DESIGN IIF (ELECTIVE) 3.0
ENDS-2507 SPECIAL TOPICS IN DESIGN IIG (ELECTIVE) 3.0
ENDS-2508 SPECIAL TOPICS IN DESIGN IIH (ELECTIVE) 3.0

Contact Hours
up to 4 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
Available Courses and Course description will be provided by the Faculty.

Assessment
assignments/projects 100%

ENDS-2511 SPECIAL TOPICS IN DESIGN IIL (ELECTIVE) 1.5
ENDS-2512 SPECIAL TOPICS IN DESIGN IIM (ELECTIVE) 1.5

Contact Hours
up to 2 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
Available Courses and Course description will be provided by the Faculty.

Assessment
assignments/projects 100%

- Bond Paper for printing and plotting is included in the charges for printing. Should you wish to use any other substrate, you will need to provide it yourself (Consult the Student Assistants as to what media can be used in the printers).

Server: The Faculty is committed to providing server space for each student. While every effort is made to make the servers secure, stable and available, the Faculty is in no way responsible for data. It is always advisable to have multiple backups of important data. Server space is limited to about 5GB for each student. Use is monitored by quota software and users exceeding their quota may lose data. Files will be maintained through August for graduating students after which the data will be erased. Note: servers are for the storage of data only. Software, regardless of the platform, movie and audio files are not to be stored on the Faculty server. Pirated software, movies, and audio files may not be downloaded or used on the Faculty hardware. Students may lose their right to use the computer facilities if in breach of this regulation. Disciplinary action may also be taken.

Software: Use of, copying, distribution, or solicitation of unauthorised or pirated software is expressly forbidden.

e-mail
The Faculty will only use university email accounts to communicate with students. As such, all students must have a university email address (initial.familyname@stud.umu.ac.ug). This is to ease communication between staff, students and your friends. It is the responsibility of the student to ensure that their e-mail accounts are set up and are able to send and receive emails, and should be checked on a regular basis. Most courses in the Faculty have online course information and/or wiki site. These are accessible via http://fobeserver.umunet. Ensure you check this site for any updates to course material and for messages from Course Instructors.

audio-visual equipment
The Faculty has two beamers and speakers for use by faculty, and these may be borrowed by students if they are not being used for a teaching.

copiers
The Faculty does not provide any copying facilities for students. Copying facilities are provided on a commercial basis by the university print shop adjacent to the refectory. There may be alternative facilities off campus.

surveying equipment
Some surveying equipment is available for use in practical sessions as well as for student design projects.
workshops
Workshop session times are used for the presentation of occasional lectures, seminars, design charrettes etc. Workshop sessions are generally programmed for Wednesday afternoons, and will cover diverse subjects of interest to students and faculty. Sessions may also be used for short design excursions and to undertake practical construction tasks and other activities related to the programmes in the Faculty. Students may also use this time to attend the university run Wednesday afternoon lecture series.

materials testing laboratory
The Faculty maintains a materials testing laboratory, under the supervision of a Laboratory Assistant qualified to operate the machinery in the laboratory. Course Instructors may, on occasion hold practical sessions in the laboratory. Students are expressly forbidden to use tools unless they have received proper instruction and training in their use and have received permission from the Dean of the Faculty. Loose clothing, loose hair, and use of audio equipment with earphones are not permitted in the laboratory. Covered shoes must be worn at all times while in the Materials Testing Laboratory when undertaking any experimental work.

dESIGN@UMU
The Faculty operates an in-house design consultancy office under the name dESIGN@UMU. Design and research projects are undertaken by staff and Graduate Assistants. Some of the projects recently undertaken include the Onyango Registry Building, and the Library at the Kisubi Brothers Centre for Uganda Martyrs University and the new Health Sciences Building, among many. Students in the final year of the B.Envi.Des. programme may apply to undertake their year out Year Out with dESIGN@UMU. Positions are limited, and highly valued. Students who have undertaken this placements have gone on to excel in the graduate professional programme.

ENDS-2243 DESIGN AND CONSTRUCTION TECHNOLOGIES III 6.0
Contact Hours
up to 8 hours of lectures/tutorials/seminars per week
Prerequisite
None
Description
Structures (Reinforced Concrete Structures) (50%): Application of strength of materials to reinforced concrete – combination of two materials with totally different behaviour (concrete and steel) and the absence of standard sections requires appropriate formulae for design purposes – following actions are considered: axially loaded columns, bending (current types of sections) (including curtailment of the longitudinal reinforcement), shear (transverse reinforcement), bond (anchorage length and concept, crack-width, deflection), combined bending and axial compressive force.
Construction (50%): Steel in construction: framing, wall and roof cladding, basic detailing. Footing systems for steel and concrete framed buildings. Basements and retaining walls. Hardscapes, and Concrete frame, wall, floor and roof systems for low to medium scale buildings.

Assessment
assignments/projects 60%, examination 40%

PEF-2201 ETHICS IN FOCUS 2.0
Contact Hours
up to 2 hours of lectures/tutorials/seminars per week
Prerequisite
None
Description
This course is designed to enable students to develop a more informed understanding of some fundamental questions in life. ‘Why am I alive?’ and ‘what makes life worth living?’: ‘What makes an action right?’ ‘What makes us happy?’ ‘What kind of qualities should a person have?’ ‘How should we treat other people?’ ‘What work ethic do we want to follow?’ We will not be able to answer these questions fully but we should complete the course a little wiser than we started it. The course will focus on ethics in contemporary society; important questions; the quest for moral uprightness; intellectual virtues; self-interest. Theoretical Perspectives on Ethics: review of influential ethical theories; theoretical discussions: subjectivism and relativism, universalism and particularism, truth in ethics, how our ethical position is related to our heritage. Applied Ethics: critical analyses of practical cases: professional ethics; development ethics; business ethics; medical ethics; ethical issues in science, ethics, and professionalism; and ethics and advancements in technology.
LEVEL II - SEMESTER II

ENDS-2212 BUILDINGS AND THE ENVIRONMENT  7.0

Contact Hours
up to 9 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
This course explores the environmental and technological aspects of design of the built environments. Key topics include climate and building climatology; thermal performance (principles of heat transfer, solar radiation effects, absorptivity, reflectivity, conduction, and thermal insulation); thermal comfort (perception of comfort, the body’s responses); natural lighting (solar geometry and control of sunlight); noise control; building structures; construction materials, techniques and processes; and the interrelationships between plants, hard landscape and domestic scale building construction. The course also introduces students to related Standards, Codes and Regulations on design for human inhabited environments. The projects encourage innovative and investigative designs that integrate environmental, human and technical issues, with the use of different manual and digital techniques to express design as well as to apply the conventions of technical documentation, practical translations of theory into built form through the design of small buildings and landscapes in urban context.

Assessment
assignments/projects 100%

ENDS-2253 CONTEMPORARY LANDSCAPE ARCHITECTURE THEORY  3.0

Contact Hours
up to 4 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
This seminar series will be an exploration of contemporary practice and issues in landscape architecture providing a philosophical and critical basis for future and concurrent design projects. This course addresses social, aesthetic and cultural principles and values as well as ecological aspects of landscape design.

Assessment
assignments/projects 100%

what you will need

books and manuals
The Faculty advises students to begin building their own personal library during their stay at university. These will act as references for your future careers. Course Coordinators and Course Instructors will suggest texts that may be useful during your studies. As a minimum, all students are required to have a print version of an English Dictionary (UK English), and a copy of the ‘Architect’s Pocketbook’ by Baden-Powell, Hetreed and Ross.

notes and handouts
Students are provided with the following basic information for all courses:
• course outlines
• statements of learning objectives
• course lecture outlines
• reading lists
• tutorial topics and problems
• assignment questions and/or requirements, including assessment criteria
• guidelines on the style and format of essays and reports.

equipment and consumables
Students are expected to purchase their own ‘professional’ equipment and consumables (paper model making materials etc.) in order to meet the requirements of their courses. Students can continue to use these in their professional life after graduating; in effect, their ‘tools of trade’. Some courses however may require specialist equipment, software and consumables for formal sessions. The Course-Coordinator/Instructor will inform you if this is the case.

details of equipment
The following is a basic list of equipment and consumables that students should have:
• 1 x A4 Visual Diary, unlined
• 1 x A5 Visual Diary, unlined
• roll of butter paper or sheets of ‘trash’ paper
• A3 pad bond paper (can be shared between students)
• A3 pad tracing paper (can be shared between students)
• masking tape / drafting tape
• A3 drawing board with (built-in) straight edge, or a T-ee square
• adjustable set square
• architectural scale ruler: scales: 1:2, 1:5, 1:10, 1:20, 1:50, 1:100, 1:200 (do not buy surveyors scale rulers with scales 1:33, 1:75 or 1:150)
• solid cardboard or plastic tube (for transporting drawings)
• drawing pencils: F, H, HB and 2B (minimum)
• pencil sharpener (with built-in shavings collector)
• eraser
• stainless steel erasing shield
• set of colour pencils (minimum 12)
• clutch pencil or mechanical pencil 0.5mm lead (HB) + spare leads
• set of drafting pens (0.18, 0.25, 0.35, 0.5mm or similar nib dimensions)
• drawing compass (which holds your mechanical pencil or clutch pencil lead)
• circle template
• model making equipment e.g. utility knife, glue (Do not buy paper glue)
• cutting board (thick dense cardboard or plastic kitchen cutting board)
• stainless steel ruler (good straight edge for cutting during model-making)
• USB memory drive (minimum size of 2Gb) for storing/transferring files

**drawing folio**
All students must have a folio large enough to contain the years graphic work. For First and Second Year Courses, a Folio of **A2** size is required, while for Third Year, and the Professional programmes an **A1** or **A0** Folio is required.

At the end of each academic year, students are required to present their portfolios for an end of year progress review. Portfolios are compulsory, and will be reviewed at the end of each academic year as part of the promotion, and as part of the external examination process.

**drawings and reproduction**
Architects and Landscape Architects do not issue originals – which are kept safely for future amendment or re-issue. In the same light, students should not submit unique originals either as they are liable to be lost or damaged. In addition, photocopying can make a messy drawing look presentable, and offers the opportunity to test presentation techniques. Note also that what you see on the screen is not always what will print, thus test prints are an important part of the production process. In some instances, students will be required to submit both the marked up draft documents, as well as the final formal documents as part of the assessment process.
of built environment professionals. Also important, is the role of experiencing different cultures and ways of life (as distinct from architectural objects) as part of the appreciation of the development of (un)built environments. The importance of travel is emphasised in this course: the immobility of buildings, and the importance of context, ensuring that travel is not only essential, but a mandatory part of the experience of (un)built environments. Students will undertake to travel around Uganda, or wider afield, exploring different places, spaces and domiciles, reviewing and reflecting on these experiences in the context of their education, demonstrating an appreciation of the development and evolution of (un)built environments and the relationship between global and local factors. These will be documented as part of a formal sketchbook and travelog.

Assessment
assignments/projects 100%

Plus a Minimum of 3 Credits from the following Electives, or an approved Course from another Faculty

ENDS-2501 SPECIAL TOPICS IN DESIGN IIA (ELECTIVE) 3.0
ENDS-2502 SPECIAL TOPICS IN DESIGN IIB (ELECTIVE) 3.0
ENDS-2503 SPECIAL TOPICS IN DESIGN IIC (ELECTIVE) 3.0
ENDS-2504 SPECIAL TOPICS IN DESIGN IID (ELECTIVE) 3.0

Contact Hours
up to 4 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
Available Courses and Course description will be provided by the Faculty.

Assessment
assignments/projects 100%

ENDS-2509 SPECIAL TOPICS IN DESIGN IIJ (ELECTIVE) 1.5
ENDS-2510 SPECIAL TOPICS IN DESIGN IIK (ELECTIVE) 1.5

Contact Hours
up to 2 hours of lectures/tutorials/seminars per week

Prerequisite
None

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graduate diploma in environmental design

The Graduate Diploma in Environmental Design (Grad.Dip.(Envi.Des.)) is a non-professional programme designed for applicants who hold previous qualifications in a related field, as well as relevant experience, to enter the professional programmes in architecture or landscape architecture offered by the Faculty. This rigorous programme of study allows graduates to apply for entry into the Master of Architecture (professional) or the Master of Landscape Architecture (professional), depending on the courses undertaken.

The curriculum of the Graduate Diploma in Environmental Studies shall normally extend over not less than one year full-time study or two years of part-time study. Successful completion of a minimum of 50 Credits, including all assessments, makes a student eligible for the award of the Advanced Diploma in Environmental Design of Uganda Martyrs University.

The Graduate Diploma in Environmental Design may be conferred with the following specialities depending on the Stream selected by the student:
Graduate Diploma (Environmental Design) (Architecture)
Graduate Diploma (Environmental Design) (Landscape Architecture)
Graduate Diploma (Environmental Design) (Building Technology)

To be eligible for the award of the Graduate Diploma in Environmental Design, a candidate:
1) shall comply with the General Regulations of the Faculty and University;
2) shall follow courses of instruction and complete satisfactorily, all prescribed written work and practical work where appropriate; and;
3) shall complete the curriculum and satisfy the examiners in accordance with the regulations and syllabuses set out in this document.
## Course Schedule

### Architecture Stream

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester</th>
<th>Hours/Wk</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENDS-1121</td>
<td>Culture, Climate and Settlements I</td>
<td>1</td>
<td>6.0</td>
<td>4.0</td>
</tr>
<tr>
<td>ENDS-1131</td>
<td>Design Fundamentals I</td>
<td>1</td>
<td>6.0</td>
<td>4.0</td>
</tr>
<tr>
<td>ENDS-1132</td>
<td>Design Fundamentals II</td>
<td>2</td>
<td>6.0</td>
<td>4.0</td>
</tr>
<tr>
<td>ENDS-2133</td>
<td>Contemporary Architectural Theory</td>
<td>1</td>
<td>4.0</td>
<td>3.0</td>
</tr>
<tr>
<td>ENDS-2212</td>
<td>Buildings and the Environment</td>
<td>2</td>
<td>9.0</td>
<td>7.0</td>
</tr>
<tr>
<td>ENDS-3113</td>
<td>Sustainable Built Environments</td>
<td>1</td>
<td>10.0</td>
<td>8.0</td>
</tr>
<tr>
<td>ENDS-3245</td>
<td>Design and Construction Technologies V</td>
<td>2</td>
<td>8.0</td>
<td>7.0</td>
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<tr>
<td>ENDS-3271</td>
<td>Architecture Design Project</td>
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<tr>
<td>PIE-1101</td>
<td>Introduction to Ethics</td>
<td>1</td>
<td>3.0</td>
<td>2.0</td>
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<tr>
<td>BET-3201</td>
<td>Business Ethics</td>
<td>2</td>
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### Landscape Architecture Stream (Not Offered 2016/17)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester</th>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENDS-1121</td>
<td>Culture, Climate and Settlements I</td>
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<tr>
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<tr>
<td>ENDS-2212</td>
<td>Buildings and the Environment</td>
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<td>9.0</td>
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<tr>
<td>ENDS-2253</td>
<td>Contemporary Landscape Architecture Theory</td>
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<tr>
<td>ENDS-3113</td>
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<td>ENDS-3273</td>
<td>Landscape Architecture Design Project</td>
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<td>PIE-1101</td>
<td>Introduction to Ethics</td>
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<td>BET-3201</td>
<td>Business Ethics</td>
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### Building Technology Stream (Not Offered 2016/17)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ENDS-1121</td>
<td>Culture, Climate and Settlements I</td>
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<tr>
<td>ENDS-1131</td>
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<td>ENDS-3113</td>
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<td>ENDS-3144</td>
<td>Design and Construction Technologies IV</td>
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<td>Design and Construction Technologies V</td>
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<td>ENDS-3272</td>
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<td>PIE-1101</td>
<td>Introduction to Ethics</td>
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<td>BET-3201</td>
<td>Business Ethics</td>
<td>2</td>
<td>2.0</td>
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</tbody>
</table>

These are indicative only. Actual course requirements will depend on the specific needs of the applicants.

### Assessment

Assignments/Projects 100%

### ENDS-2142 DESIGN AND CONSTRUCTION TECHNOLOGIES II 6.0

#### Contact Hours

Up to 8 hours of lectures/tutorials/seminars per week

#### Prerequisite

None

#### Description

**Structures** (Strength of Materials II) (50%): Detailed study of current actions in structural elements: bending (including unsymmetrical or bi-axial bending), shear (solid and thin-walled sections), torsion (solid and thin-walled sections), combined bending and axial load (eccentrically loaded columns and footings) – calculation of the related deformations (emphasis on bending: slopes and deflections) – connections (bolts and welds) – application to current structural elements (timber floors, steel girders)

**Concrete Technology** (25%): Concrete (characterized by a very low tensile strength but reasonable compressive strength), is often combined with steel (characterized by a high tensile strength): the combination is called reinforced concrete. This course will deal with a brief historical background and present importance of concrete in building constructions – properties of the constituent materials (cement, fine and coarse aggregates, water, admixtures) – fundamentals of concrete mix design – storage, batching and mixing of the constituents – properties of fresh concrete (density, workability, temperature) – conveying and casting – curing (influence of temperature and relative humidity) – properties of hardened concrete: compressive and tensile strength, deformations under zero (shrinkage), short and long (creep) term loading, E-modulus, fatigue) – basic principles of quality control.

**Construction** (25%): Introduction to masonry and timber in design and construction with and emphasis on small to medium scale buildings and hardscapes. The basic physical properties, manufacturing processes, use and performance of masonry and timber. An introduction to construction documentation standards.

### Assessment

Assignments/Projects 60%, examination 40%

### ENDS-2361 FIELD EXPERIENCE I 1.0

#### Contact Hours

Up to 16 hours of preparatory lectures, seminars and workshops, as well as presentations during the proceeding semester.

#### Prerequisite

None

#### Description

Learning from existing (un)built environments is particularly important in the formation
LEVEL II - SEMESTER I

ENDS-2111 URBAN & REGIONAL PLANNING AND DESIGN 7.0

Contact Hours
up to 9 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
To introduce the interdisciplinary discipline of urban and regional planning and landscape design, its origins, importance and application in today’s milieu. The course will cover: History of urban planning and landscape architecture: Origins of planning, city forms through history, brief introduction to the principles, concepts and approaches of urban design and landscape architecture, contemporary urban design issues, techniques and evaluation criteria for urban design inquiry, city building trends. Physical environment and site planning: location and site analyses, land use planning and program development, environmental standards and facilities, landscape architecture and landscape planning, infrastructure for urban and rural development and site formation, infrastructure and street furniture. This course will include an Urban planning studio: a series of sessions examining basic design concepts, and developing practical drawing and sketches of urban design proposals for selected sites.

Assessment
assignments/projects 100%

ENDS-2133 CONTEMPORARY ARCHITECTURAL THEORY 3.0

Contact Hours
up to 4 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
This course seeks to familiarise students with contemporary discourse in architecture and urban planning, and design. The course will go beyond the basic review of history and theory, and will seek to develop critical and analytical skills that will enable students to understand the main architectural contributions of the late twentieth and twenty first centuries. Fundamental texts to which architects have referred will be read and discussed in relation to the vocabulary used, the theories employed and their historical context. Students will also be required to explore a selected area of architectural theory through case studies of contemporary works of architecture in order to relate and ground theory with contemporary practice and its associated social, economic and political concerns.

The Bachelor of Environmental Design (B.Envi.Des.) degree is a non-professional qualification that is a pre-requisite for the professional programmes offered by the Faculty. It is also aimed at those seeking mid level non professional careers.

The curriculum of the Bachelor of Environmental Design shall normally extend over not less than three years of full-time study or six years of part-time study. Successful completion of a minimum of 120 Credits including all assessment, makes a student eligible for the award of the Ordinary degree of Bachelor of Environmental Design of Uganda Martyrs University. Completion of an additional 4 Credits in the course, Advanced Studies in Design, for a total of 124 Credits is required to be eligible for the award of the degree of Bachelor of Environmental Design with Honours of Uganda Martyrs University.

The Bachelor of Environmental Design is conferred with the following specialities depending on the Stream selected by the student:

Bachelor of Environmental Design (Architecture)
Bachelor of Environmental Design (Landscape Architecture)
Bachelor of Environmental Design (Building Technology)
Bachelor of Environmental Design (Environmental Studies)

To be eligible for the award of the degree of Bachelor of Environmental Design, a candidate:
1) shall comply with the General Regulations of the Faculty and University;
2) shall follow courses of instruction and complete satisfactorily, all prescribed written work and practical work where appropriate; and;
3) shall complete the curriculum and satisfy the examiners in accordance with the regulations and syllabuses set out in this document.
### Course Schedule

#### Level I

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Sem.</th>
<th>Hrs/Wk</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENDS-1101</td>
<td>Computer Skills</td>
<td>1</td>
<td>2.0</td>
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<tr>
<td>ENDS-1121</td>
<td>Culture, Climate and Settlements I</td>
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<td>ENDS-1222</td>
<td>Culture, Climate and Settlements II</td>
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<tr>
<td>ENDS-1131</td>
<td>Design Fundamentals I</td>
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<td>ENDS-1140</td>
<td>Numeracy and Problem Solving</td>
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<td>ENDS-1151</td>
<td>Natural and Built Environment Systems I</td>
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<td>ENDS-1252</td>
<td>Natural and Built Environment Systems II</td>
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<tr>
<td>PIE-1101</td>
<td>Introduction to Ethics</td>
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<td>ENG-1101</td>
<td>English Language and Grammar</td>
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<td>LIT-1201</td>
<td>English Literature and Composition</td>
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#### Level II

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<th>Course Title</th>
<th>Sem.</th>
<th>Hrs/Wk</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENDS-2111</td>
<td>Urban and Rural Planning and Design</td>
<td>1</td>
<td>9.0</td>
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<tr>
<td>ENDS-2212</td>
<td>Buildings and the Environment</td>
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<td>ENDS-2142</td>
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<tr>
<td>ENDS-2243</td>
<td>Design and Construction Technologies III</td>
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<tr>
<td>ENDS-2133</td>
<td>Contemporary Architectural Theory</td>
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<tr>
<td>ENDS-2253</td>
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Plus a Minimum of 6 Credits from the following Electives, or an approved Course from another faculty

<table>
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<tr>
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<th>Sem.</th>
<th>Hrs/Wk</th>
<th>Credits</th>
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<td>Special Topics in Design IIIM</td>
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</tbody>
</table>

* largely undertaken during the preceding Long Vacation.

Built environment and the natural environment: on one hand, there is the extraction and processing of renewable and non-renewable resources from the natural environment to further the development of the built environment, as well as the disruption of the ecological balance; on the other hand, wastes (solid, liquid, gaseous, heat, etc.) are transferred back to the natural environment as a result of processes within the built environment. This component addressed how this can, or should be sustainably managed.

Built Environment Systems: For this component, the student builds on the history, growth and formation of human settlements and habitats through a detailed study of elements of a particular settlement. These studies of individual buildings, landscapes or settlements try to shed light on how they interface with the surrounding environment as well as with itself as a particular artefact in the environment. The component will cover human needs and how these are achieved, including: ventilation, water and waste supply and management, energy needs and natural lighting.

**Assessment**

- Assignments/Projects 100%

**LIT-1201 ENGLISH LITERATURE AND COMPOSITION 2.0**

**Contact Hours**

- Up to 3 hours of lectures/tutorials/seminars per week

**Prerequisite**

- None

**Description**

This course is a study of the principles of composition with emphasis on reading, analysis, the mechanics of writing, documentation and research. The course is designed to help students develop the skills in reading, writing and spoken English that they will need to succeed professionally. This course employs literary texts to provide examples for students to refine writing, reading and analysis skills, grammar and common punctuation as well as students' ability to relate literature written text to the real world. Modern and contemporary readings: plays, poems, short stories, and personal essays will be critically reviewed and analysed.

**Assessment**

- Assignments/Projects 50%, Examination 50%
Assessment
assignments/projects 100%

**ENDS-1241  DESIGN AND CONSTRUCTION TECHNOLOGIES I  4.0**

**Contact Hours**
up to 6 hours of lectures/tutorials/seminars per week

**Prerequisite**
None

**Description**
This course provides an introduction to the theories and practice of construction. Building construction is investigated in relation to the cultural, technological and historical context in which they appear. Students are introduced to materials and materiality, structural behaviour and construction techniques.

**Structures (Strength of Materials I) (50%):** Sections in structural elements and related concept of internal forces – calculation of internal forces (FBD) in structural elements as trusses, columns and beams (mainly shear force and bending moment) and drawing of related diagrams – concept of stress and strain – basic assumptions for elastic calculations – fundamental formulae (complementary property of shear, Hooke’s laws, strength criteria) – practical application to elements subjected to axial forces (columns, members of trusses)

**Construction (50%):** Introduction to different ways of thinking about construction in relation to design practice. Investigation of the artifactual nature and materiality of buildings. Outline of construction principles and their implications for the development of construction strategies in architectural design.

Typical theoretical and practical work in this course includes: interpreting theoretical texts concerned with technological issues; writing concise theoretical texts; design of a small-scale site specific project; building scale models of a small-scale building and its site/topography; building scale models of construction details; reading scaled/wrking drawings; and representing ideas by applying the conventions and graphical standards in graphical representations.

**Assessment**
assignments/projects, tests and examinations

**LEVEL III**

**ENDS-3113 Sustainable Built Environments 1 10.0 8.0**

**ENDS-3144 Design and Construction Technologies IV 1 8.0 7.0**

**ENDS-3362 Field Experience II * 1.0 1.0**

**Architecture Stream**

**ENDS-3271 Architecture Design Project 2 10.0 10.0**

**ENDS-3245 Design and Construction Technologies V 2 8.0 7.0**

**BET-3201 Business Ethics 2 2.0 2.0**

**Building Technology Stream (Not Offered 2014/15)**

**ENDS-3272 Construction Technology Project 2 10.0 10.0**

**ENDS-3245 Design and Construction Technologies V 2 8.0 7.0**

**BET-3201 Business Ethics 2 2.0 2.0**

**Landscape Architecture Stream (Not Offered 2014/15)**

**ENDS-3273 Landscape Architecture Design Project 2 10.0 10.0**

**ENDS-3245 Design and Construction Technologies V 2 8.0 7.0**

**BET-3201 Business Ethics 2 2.0 2.0**

**Plus a Minimum of 6 Credits from the following Electives, or an approved course from another faculty**

**ENDS-3501 Special Topics in Design IIIA 1 4.0 3.0**

**ENDS-3502 Special Topics in Design IIIB 1 4.0 3.0**

**ENDS-3503 Special Topics in Design IIIC 1 4.0 3.0**

**ENDS-3504 Special Topics in Design IIID 1 4.0 3.0**

**ENDS-3505 Special Topics in Design IIIE 2 4.0 3.0**

**ENDS-3506 Special Topics in Design IIIF 2 4.0 3.0**

**ENDS-3507 Special Topics in Design IIIG 2 4.0 3.0**

**ENDS-3508 Special Topics in Design IIHI 2 4.0 3.0**

**ENDS-3509 Special Topics in Design IIJ 2 2.0 1.5**

**ENDS-3510 Special Topics in Design IIK 1 2.0 1.5**

**ENDS-3511 Special Topics in Design IIL 2 2.0 1.5**

**ENDS-3512 Special Topics in Design IIM 2 2.0 1.5**

* largely undertaken during the preceding Long Vacation.

**Honours**

**ENDS-3601 Advanced Studies in Design 1/2 4.0 4.0**
LEVEL I - SEMESTER II

ENDS-1222  CULTURE, CLIMATE AND SETTLEMENTS II  4.0

Contact Hours
up to 6 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
This course is concerned with histories and theories of designed environments (architecture and landscape architecture) and related design discourse since the 19th Century. Formal and theoretical developments are placed in a coherent historical framework through which further spatial and cultural dimensions may be better understood. While focussing on the global reception and resistance to Modern (European) ideas and forms, the course also addresses issues of cultural difference, including differences in design disciplines and their respective (sub)cultures, and different social backgrounds, needs, preferences, and how these are reflected and responded to in the development of designed environments.

Coursework entails both written and design assignments. These may include critical explorations of specific design theories and relationships through short analytical texts and three-dimensional compositions, as well as practical translations of theory into built form through the design of small buildings and landscapes in particular contexts.

Assessment
assignments/projects 80%, tests 20%

ENDS-1232  DESIGN FUNDAMENTALS II  4.0

Contact Hours
up to 6 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
This course provides an introduction to the fundamentals of design with reference to the built environment, including: the relationships of climate/site, culture/history and technology, meaning and emotional attachment to space and site, and relating it to the making of projects, and strategies for designing. The course engages students in active learning through research and project work, both individually and in collaboration with others, to translate ideas and concepts into form in a meaningful way.

Coursework emphasises developing design communication skills: hand/manual and digital drawing, oral presentation with appropriate visual aids, and written communication.
introduced to key ethical terms, and some of the great ethical traditions (traditional African, Buddhism, Hinduism, Islamic, Judeo - Christian traditions) as well as classical ethical theories. The second part will deal with applied ethics (Professional ethics, business ethics, sexual morality, bio-ethics, environmental ethics and ethical dilemmas). The course provides a basis for the critique of ethics.

Assessment
assignments/projects 50%, examination 50%

ENG-1101 ENGLISH LANGUAGE AND GRAMMAR 2.0

Contact Hours
up to 3 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
Language Review (Parts of Speech, including names and functions); Sentence Structure (Simple, Compound, Complex; Phrases, Clauses, Parallel constructions, Modifier Placement, Subject-verb agreement, Comparison Constructions); Punctuation Usage; Writing mechanics (Set-up, footnotes, bibliography); Separation of fact and opinion. Types (Note taking, technical reports, technical evaluation of others’ work, and essay writing). Use of the library, and the Internet for research. This Course is offered by the Faculty of Education.

Assessment
assignments/projects 50%, examination 50%

syllabus

LEVEL I - SEMESTER I

ENDS-1101 COMPUTER SKILLS 1.0

Contact Hours
up to 30 hours of lectures and tutorials

Description
This course is intended to introduce the student to computers and their use in the architectural and engineering professions. This course is a hands-on learn-by-doing course geared to help students fully utilise available computer facilities. The subject will include a very brief history of computer system development, and a brief overview of computer hardware and operating systems/user interfaces (Unix, Linux, MacOS and MSWindows). Practical sessions will cover file structure and management, software and saving work; Word processing; (OpenOffice, Pages or similar) - format, tools, windows, printing, etc; Spreadsheets: (OpenOffice or similar): format, formulae, functions, sheets, graphs, pie charts, print, etc; Graphics: (Photoshop, or similar): presentation, photo and graphic image editing, combining text and images, etc.; The Internet: Internet search methods and internet etiquette.

Assessment
assignments/projects 100%

ENDS-1121 CULTURE, CLIMATE AND SETTLEMENTS I 4.0

Contact Hours
up to 6 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
This foundation course provides an introduction to design theories in the historical and socio-cultural context of pre 19th Century human settlements. The course seeks to give students a global perspective as well as an awareness of the context of built environments and how these impact on the local context. The course focuses on vernacular architecture and its response to climate, construction traditions and available resources, as well as the role of social structure and cultural customs on architecture. The roles of architectural designers and writers, methods of representation and reproduction involved in constructing and propagating architectural ideas, and important historical perspectives that situate the developments of human settlements will be explored. Exercises are designed to stimulate skills in research, critical thinking, analysis and debate, as well as academic writing protocols for short analytical texts.

Assessment
assignments/projects 80%, tests 20%
ENDS-1131 DESIGN FUNDAMENTALS I 4.0

Contact Hours
up to 6 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
This course introduces design as the fundamental basis for thought and action in built environment disciplines. Exploration of the influences on design thinking and practice, including the philosophical, historical, social and environmental precedent studies. Critical thinking and expression in different forms will be encouraged / fostered.

Projects and assignments are geared to the development of skills and understanding of design elements and principles. Introduction to a basic vocabulary of representation techniques used by designers to facilitate the development and communication of design ideas including: colour, freehand drawing, sketching, painting, construction, mixed media, desktop publishing, photomontage techniques.

Assessment
assignments/projects 100%

1140 NUMERACY AND PROBLEM SOLVING 3.0

Contact Hours
up to 4 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
This course is designed to engage students with the principles of Physics and Mathematics that are necessary for Architecture and Engineering. Specifically, it acts as a prerequisite to the Design and Construction Courses, as well as the Building Services courses. The course is conducted mainly through students carrying out group assignments solving rich, open ended, real world mathematical problems in order to strengthen their mathematical reasoning, systematic problem solving and effective teamwork. It is divided into three components:

General Numeracy and Problem Solving: Numbers, Mathematical Reasoning, Problem solving; Units, Measures and Scale; Estimation and Approximation; Proportions and Percentages; Mathematical Representation (Equations and Graphs). Vectors: Introduction to Vector and Scalar Quantities, Vector representation on the XY plane, Addition and Subtraction of Vectors, Magnitude of Vectors, Resultant of vectors; Simple Analysis of Forces in Buildings.

Thermodynamics: Thermal Equilibrium, Thermal Expansion and Thermal Stress; Heat transfer through solids and fluids (Conduction, Convection, and Radiation); Emissivity of materials/surfaces; Humidity and Condensation: principle causes and remedies of condensation.

Assessment
assignments/projects 60%, examination 40%

ENDS-1151 NATURAL AND BUILT ENVIRONMENT SYSTEMS I 4.5

Contact Hours
up to 6 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
This course provides an introduction to the concept of systems thinking, including ‘natural’ and human-made systems with an emphasis on the built environment context; relationship between ‘natural’ systems and design/construction as well as their impact on each other; and the concept of sustainability of environmental systems. Emphasis is placed on the processes and interaction between the wider natural and built environments, as well as the microclimates of different rural and urban settlements. The course is divided into two components:

Natural Environment Systems: This component focuses on processes and cycles within natural systems, and highlights the ways in which human interaction has impacted them. The basic concepts of natural and human-made landscapes are also introduced.

Built Environment Systems: This component deals with the formation and growth of human settlements and habitats, and understanding how these habitats exist as systems and how they affect the macro environmental system, as well as the processes within micro systems. This will include a study of the concept of sustainability in general, but with particularly emphasis on human settlements (both rural and urban). Students will explore these with reference to their immediate environment, as well as with examples from within the region. Topics will include two areas in particular: Regional Climatology and Human Activities and Settlement Patterns.

Assessment
assignments/projects 100%

PIE-1101 INTRODUCTION TO ETHICS 2.0

Contact Hours
up to 3 hours of lectures/tutorials/seminars per week

Prerequisite
None

Description
This course introduces students to the fundamental principles, concepts and ideas of ethics. This course is intended to demonstrate and show the importance and role of ethical reflection and its practical application in everyday life and in the work place. The first part of the course explores the foundation and practices of ethics. It will look at views, nature and origins of ethics; prejudices against ethics. Students will be