AUS | الجــامعــة الأمـيـركـيــة فــي الشـــارقــة
American University of Sharjah

COLLEGE OF ENGINEERING
كلية الهندسة

College of Engineering Undergraduate Research Grant (CEN-URG) Program
AY 2023-2024
Guidelines

Purpose: To encourage CEN undergraduate students from all programs to participate in and disseminate independent research, scholarly, and creative (RSC) activities under the mentorship of college faculty. RSC activities are conducted by students under the supervision of a faculty member, and can take diverse forms, such as independent study, a term project, engagement in a large ongoing study, participation in external RSC-related competition, or presentation of completed works at an academic event.

Student Eligibility:
- The student applicant must be a full-time, continuing, undergraduate student in good standing (academic and disciplinary) at the American University of Sharjah. The project must be completed during the period that the student is enrolled as a full-time undergraduate student.
- The maximum number of awards a student may receive is as follows: one award for an individual project or a group project in which she/he is the primary applicant and one award for a group project in which she/he is *not* the primary applicant.

Submission Deadlines:
Fall semester: October 10, 2023
Spring semester: February 16, 2024

Email the proposals to: cen_admin_office@aus.edu

Evaluation and Notification:
A committee formed by the Office of the Dean will evaluate applications. The committee's decision will be shared with the student applicants, faculty mentors, and relevant department heads.

Project Classes: Projects are categorized based on the following:
1. **Individual project**: This is for an individual student who will be engaged in research, scholarly, and creative activity under the mentorship of an AUS faculty member. The budget requested should not exceed **AED 5,000**.
2. **Group project**: This is for a project consisting of two or more students working under the mentorship of an AUS faculty member. The maximum budget is up to **AED 10,000**.

Grant Expenditures: Grant funds must be applied to tangible expenditures for research, scholarly, and creative activity conducted by student participants. Tangible items include consumables, supplies and possibly service contracts. The applicant must discuss the financial needs of the project with her/his faculty mentor before submission of the proposed budget. Please see the Budget section in Appendix A for more details. Travel requests to attend international conference are not acceptable.

Grant Period: Funds allocated by this program must be spent within one year from the project award date and before the time when the primary applicant leaves the AUS, whichever is sooner.

Proposal Package: A proposal package should be in accordance with the formatting and guidelines as described in Appendix A.

Compliance Information: All proposed work must be in compliance with AUS regulations and policies. Please refer to Appendix D for more information.

Project Management:

In cases where a project needs to have more than one faculty mentor to provide the expertise necessary to mentor the student(s), a Faculty Mentor must take on the role of **Primary Faculty Mentor** who supervises the project from the administrative point of view and budget spending.

Once the grant decisions are finalized, grant funds will be spent under the supervision of the Primary Faculty Mentor. The Primary Faculty Mentor is then responsible for supervising the project, approving the disbursement of funds, and monitoring and reporting the project performance. The project execution must follow all applicable AUS rules and regulations (including, but not limited to: finance, procurement, human resources, travel, etc.). For any budget change, it is required to have the Primary Faculty Mentor's endorsement and the Dean's Office's approval. Any purchases, such as equipment and supplies, will always remain as AUS property (in the Primary Faculty Mentor's department).

Award Requirements:

A **student** who is awarded a CEN-URG must:
1. Be able to complete the project as an enrolled full-time undergraduate student at AUS;
2. Present her/his work at relevant events as requested by the college;
3. Reference the grant in any presentations and publications resulting from the proposed project.

The **Primary Faculty Mentor** must collect and endorse a one-page minimum Final Project Report from the student/group and submit to cen_admin_office@aus.edu within 30 days of project end date.

APPENDIX A: Proposal Package: Formatting and Composition

In the proposal package, each page must be typed in 12-point Times New Roman font with 1-inch margins.

The entire proposal package must be combined into a single pdf file – machine readable/searchable pdf, not scanned - titled "<Last name of the primary applicant>_<First name initial>_<Cycle>". For example, if the name of the primary applicant is Joe Smith and the proposal is submitted during the 2022-2023 academic year, then the file name should be "Smith_Joe_Fall2022" during Fall semester, or "Smith_Joe_Spring2023" in Spring semester.

A complete proposal package must have the following components:

a. **Proposal Coversheet:** All applications must use the proposal coversheet template provided in Appendix B. Complete required fields and obtain required signatures. Scans of original signatures, or digital signatures, are acceptable. However, a typed name is not an approved signature.

b. **Research Project Support:**
   i. **Project Description (4 pages maximum):** The description must state the proposed work in a clear, concise, and understandable manner. It is suggested to include the following:
      1. Definition of project objectives. The proposal should explicitly state what the project will accomplish. Be sure to state clearly what the central ideas, hypothesis, and/or purposes are.
      2. Background: Provide a review of previous work conducted in the area related to the proposed work (if applicable).
      3. Methodology. Describe the specific steps and/or tasks that will be accomplished (including how data/information will be obtained), in order to achieve the purpose of the proposed project.
      4. Anticipated outcome(s) and impact. Describe expected results/outcomes and identify how they may make an original intellectual or creative contribution to the discipline or practice. In other words, there should be a description of:
         - the importance of the proposed project in the discipline,
         - the value of the proposed work, and
         - the contribution of the proposed original, intellectual, or creative work to the discipline.
      5. Qualification of the primary applicant and her/his team. Justify why the primary applicant has had sufficient skills and knowledge to carry out the project. For a group project, clearly identify the role of each group member.
      6. Other available resources and support. State clearly, in addition to this grant being applied, if any other resources and support (e.g., fund, equipment, supplies, etc.) are available for executing the project.
   ii. **Work Plan (1 page maximum):** Please include a detailed timeline for completing the project successfully. Include the expected start date, specific steps involved to conduct the study, completion date which should occur before the anticipated graduation date. The timeline must be both systematic and realistic.
   iii. **References (2 pages maximum):** List references related to the proposed work.
   iv. **Travel funding support:** If the application might require financial support for travel, include an estimate of it in the budget.

c. **Budget and Budget Justification (2 pages maximum)**: All applications must use the budget template provided in Appendix C. Include one item per line for all funds being requested. For each item, indicate details of the specific item requested, quantity needed (consistent with methodology), and cost. For the budget justification, provide a narrative explanation of each budget item, which "justifies" the cost in terms of the proposed work. The explanations should focus on how each budget item is required for the completion of the project. If the budget exceeds allowable grant amount, please explain how the remainder will be funded.

Examples of <u>allowable</u> expenses include, but are not limited to:
- consumable chemicals, materials, laboratory supplies, etc.;
- artistic supplies, software and databases, and small equipment that are <u>not</u> readily available in the department/college;
- photocopying related materials;
- visiting partner institutions and/or attending local research events; and
- partial costs for local transportation, food, and accommodation in line with AUS Business Travel policy limitations.

Examples of unallowable expenses include, but are not limited to:
- stipends, salaries, living expenses, tuition, and laboratory fees for any AUS personnel;
- costs normally associated with department/college budgets (e.g., computers or laptops for use at AUS);
- costs associated with the external funding of the student's faculty advisor for research in the same general area; and
- professional development and training.

d. **Health and Safety Issues:** Include a statement if the project will involve health and safety issues, use of chemicals or explosives, etc.

e. **Endorsement Letter from Primary Faculty Mentor (2 pages maximum):** A letter from the Primary Faculty Mentor should endorse the project/travel, address the merit of the work, and provide an assessment of the applicant(s)' ability to successfully complete the project.

f. **AUS RSC Compliance Form for CEN-URG** (if needed - please see Appendix E)

Post-award:
- Reimbursement or purchase of consumables or supplies must be executed through the Primary Faculty Mentor. Using standard research reimbursement claim forms, scans of original receipts and in accordance with AUS acquisition rules. All post-award expenditure requests should go from the Primary Faculty Mentor to their respective department admin assistant.
- Travel award recipients must submit reimbursement forms and receipts, no later than two weeks after the conference or event.
- Original receipts need to be submitted for hotels, taxis, conference registrations and other expenses incurred. As per AUS policy, payments for air tickets will be reimbursed provided that the ticket price is lower than the rate provided by the AUS Travel Office.
- All needed reimbursement forms and documents should be sent to the respective department admin assistant.
- AUS policy requires that students who are absent as the result of participation in a university-sanctioned extracurricular event approved by the CEN-URG must notify instructors at least two weeks in advance of the event-related absence and, if the requirements of the course allow, instructors are expected to make reasonable accommodations that may include make-up exams or the submission of assignments prior to an absence.

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APPENDIX B: Proposal Coversheet

CEN Undergraduate Research Grant AY 2023-2024

PROPOSAL COVERSHEET

Project Classes (Check one): ☐ Individual Project ☐ Group Project

Proposal Title: _____

Requested Amount of Funds: AED_____

We (I) certify that we (I) shall adhere to the AUS Student Handbook and all AUS policies and regulations to carry out the proposed project if awarded.

Primary Applicant

First Name: _____ **Last Name:** _____ **Signature:** _____

AUS ID Number: _____ AUS Email Address: _____

Current GPA: _____ Expected graduation Date: _/_/___ College/Department: _____/_____

Co-Applicant I

First Name: _____ **Last Name:** _____ **Signature:** _____

AUS ID Number: _____ AUS Email Address: _____

Current GPA: _____ Expected graduation Date: _/_/___ College/Department: _____/_____

Co-Applicant II

First Name: _____ **Last Name:** _____ **Signature:** _____

AUS ID Number: _____ AUS Email Address: _____

Current GPA: _____ Expected graduation Date: _/_/___ College/Department: _____/_____

Co-Applicant III

First Name: _____ **Last Name:** _____ **Signature:** _____

AUS ID Number: _____ AUS Email Address: _____

Current GPA: _____ Expected graduation Date: __/__/___ College/Department: ____/_____

We certify that each of us has reviewed the application and hence endorse the proposed project.

College: _____**Department** _____

Primary Faculty Mentor: _____Signature: _____

Head of Department: _____Signature: _____

APPENDIX C: Budget Template and Justifications

Budget (add lines as necessary):

Item Description	Unit Price (AED)	Quantity	Total Price (AED)
(Example) Portable Disk Drives 5T	250.00	2	500.00
(Example) Lucifer Yellow CH dilithium salt	1,000.00/25mg	50mg	2,000.00
(*Example*) Transportation cost of round trip from AUS to a site or local conference	300.00/day	1	300.00
Total Costs			2,800.00

Budget justification:

1. *(Example)* Portable Disk Drives are needed to store the data collected and share them with the faculty mentor and his research group.
2. *(Example)* Lucifer Yellow: The project needs the chemical compound Lucifer Yellow to act as one of my controls during my experiments. This compound will be used specifically as a non-permeable control group. While this project requires 75mg of Lucifer salt, given the budget limitation I am requesting only funds for 50mg. My faculty mentor has agreed to cover the remaining 25mg in support of this proposed project.
3. *(Example)* Attendance of a local conference or travel to a coastal site to collect samples.

APPENDIX D: Primary Faculty Mentor's Letter of Endorsement

Please ensure that the endorsement letter from the faculty mentor addresses the following:
1. The importance of the research and how it contributes to the student's development and to the discipline or practice.
2. The feasibility of the proposed project and timeline presented (evaluation of the project).
3. The capability of the student in pursuing and completing the research in the timeframe identified.
4. Mentor's willingness to provide oversight of the project including meeting with the student regularly and reviewing their work in preparation for presentation at any relevant research event.
5. The justification of funding as it applies to its impact on this specific project and state clearly if other funding has been available. For example, how will the grant support parts/all of the project not covered by any grants available?

APPENDIX D: Compliance Information

If the intended research involves human subjects, applicants and their faculty mentors must adhere to any applicable AUS Policies and Procedures and obtain an Institutional Review Board (IRB) approval.