

APPLICATION PACKET CHECKLIST

The applicant should complete and return by email to: CECS_SS@utrgv.edu

the following documents:

- ✤ □ Student Application pages (Pages 2-3)
- ✤ □ Ranking of Project Preference (Page 4)
- ✤ □ Statement of Understanding (Page 5)
- ✤ □ Letter of Interest (Instructions Page 6)

To be completed by your referee (One reference Letter required)

- ✤ □ Letter of Recommendation
- Must be sent directly from the email address of the person writing the recommendation. (Please ask your recommender to Email: CECS_SS@utrgv.edu)

Deadline: March 25th 2025

Selection of the Summer REU interns will be made as applications are received and will continue until all positions are filled. Incomplete applications will not receive full consideration.

For more information and questions:

Email: <u>CECS_SS@utrgv.edu</u>

Web site: https://www.utrgv.edu/reu mse/



STUDENT APPLICATION

Please type or print clearly and answer each question completely.

1. Full legal name

Last	First	М			
2. Permanent (Home)	Mailing Address:				
Number and Street or P.O. Bo	X				
City	State	Zip Code			
Phone #					
3. Emergency Contact	: Name:	Phone #:			
4. Current Mailing Add	lress, Telephone (your mobile	e# preferred):			
Number and Street or P.O. Bo	DX	· ,			
City	State	Zip Code			
Phone #					
5. Applicant E-mail ad	dress:				
6. Birth Date MonthDay	Year				
7. Gender M/F					
8. Ethnicity					
9. Current Undergrad	luate Institution Name & Type	(Public, Private, Community College)			
Institution Name					

10. Does your current undergraduate institution have limited access to research (e.g. 4 year teaching college, or Primarily Undergraduate Institute (PUI))

Circle one YES / NO

11. Undergraduate Level During 2024-2025 Academic Year(Circle One)							
	Sophomore	/	Junior	/	Senior		
12. Academic	standing						
High School G	iPA:						
Current degree	e program(s) in which you	u are enr	olled:				
Undergraduate	e Overall GPA:						
GPA in your N	lajor:						
Are enrolled in	any Minor tracks?	If	yes, which one(s) and w	hat are the	GPA's?	
What is your e	xpected date of Graduati	on from y	our Major? Mon	th	_Day	_Year	
13. Future Int schoo	erest: after receiving you I, law school, other profe	ir degree ssional s	, are you interes chool, full-time e	ted in gra mploym	aduate scho ent, or "not s	ool, medical sure?"	
14. Academic receiv	Awards/Recognition: I ed while in college	ist any ad	cademic awards	or schola	arships you	have	
15. Briefly de study, preser	scribe any previous res hourly work, or internshi ntations.	earch ao	ctivities you hav	e comple g publica	eted as inde ations and/o	pendent r	
 16. Have you e 17. How did yo from □NSF flye 18. I hereby c applic under applic 	ever been convicted of a pu hear about the REU pr er □poster ertify that to the best of cation is true and comp stand that if found to b	felony? N ogram? ⊡one c f my knc lete with e otherw o the RF	loYes _ Check one: f your professors wledge the info out evasion or rise, it is sufficio	(atta ormatior misrepr ent caus	ach explanation) □other on this . I tion of my	

Applicant's Signature

Ranking of Project

indicate your 4 choices of research project (4 choices ranked as F, C, D, E etc.) below

My top 4 ranking of projects:

1.	
2.	
2	
J.	
4	

Ranking of projects will be considered but cannot be guaranteed. If several selected applicants rank the same topics you will be contacted to work out project selection.

- A. Electrochemical Sensor for Dopamine detection by EIS technique
- B. Ultra-fast Laser-Assisted Nano-particle Synthesis, Collection, and Analysis
- C. 2D ZnO-Nanoflakes (NFs)-based Multichannel Array Platform for Wearable Human Sweat Analysis
- D. Harnessing Multipurpose Nanoparticles for Enhanced Porous fibrous Composite Membrane Production via Pickering Emulsion
- E. Synthesis of Gold and Iron Nanoparticles with Single-Stranded Circular DNA Passivation by Reactive High-Energy Ball Milling (RHEBM) as a Potential Biosensor
- F. Fabrication and characterization of fiber-reinforced hydrogel biomaterials
- **G.** Fabrication and Characterization of Proton Exchange Membrane Fuel Cell Sensor for Volatile Organic Compound (VOC) Detection
- H. Investigation of the structure and morphology of nanomaterials used as Lithium-ion battery electrodes.
- I. Study of Two-Dimensional Nanomaterial Infused Photocurable Polymer Nanocomposite Device Fabrication by Direct Ink Writing

STATEMENT OF UNDERSTANDING

Applicants should read and initial each item below, and then sign this Statement of Understanding acknowledging acceptance of the requirements and provisions of the Summer NSF REU Site hosted by UTRGV.

□Late arrivals or early/late departures cannot be accommodated. Full time attendance is required. The program period is 2nd June 2025 – August 8th 2025.

- The primary purpose of the Material Science and Engineering REU Program is to gain experience in advanced research approaches and techniques in multidisciplinary research activities and in written and oral presentation of research outcomes.
- The REU Program centers around the REU student-faculty and REU student-graduate student mentor relationships by which each student is guided in conducting independent research.
- The REU student is expected to work independently in an unstructured environment, which is typical of research.
- The REU student will deliver a publication ready manuscript draft at the end of the summer program, and make a final oral/poster presentation of project results at a special symposium during the last week.
- □The REU student will participate in all the academic components of the program including the first-week workshops in material research methods, safety training, reporting research results, communication skills, and environmental ethics, as well as seminars, tours, and group meetings during the 10-week program.
- The participant will devote full-time to the REU Program during the 10-week summer session. He/she will not take part in other academic or work activity such as attending classes or holding a job.
- □In general, housing will be provided for non-local REU students. Students should not expect that funds from the REU Program be used to subsidize off-campus housing.
- The NSF-REU Site at UTRGV provides all summer interns with stipend of \$7000 for program completion (bi-weekly payment). For non-local participants there will be an additional up to \$1400 reimbursement for housing and travel.
- The REU program has the option of dismissing a student from the program for reasons of misconduct, or who does not follow the requirements and expectations listed above.

I hereby certify that I have reviewed this Statement of Understanding and I agree to the NSF-REU Site Program and the University of Central Florida requirements and provisions.

LETTER OF INTEREST

Please describe on a separate sheet (maximum 2 pages) your interest in the REU Program on Material Science and Engineering at UTRGV.

Please include the following in your letter of interest:

- your personal goals related to the summer research program
- your interests in Material Science and Engineering research in general your post-graduation professional plans
- how the REU summer program fits in with your previous experience from coursework, research/independent study, and/or jobs you have had

