



**NATIONAL  
UNIVERSITY**

# **RESEARCH MANUAL**



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## MANUAL VERSION CONTROL LOG



Version Control No.	Description	Date	Remarks
RAD – RI – D – M – 001	Guidelines on the conduct of Research efforts within National University	November 1, 2020	Approved on 2020
RAD – RS – D – M – 001	Guidelines on the conduct of Research efforts within National University	April 4, 2022	Approved on 2022

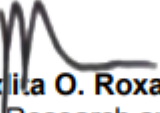
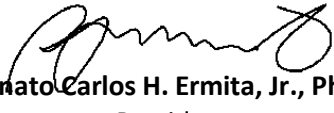
Date of Effectivity	4 April 2022	Control Mark	Page 2 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

**MANUAL APPROVAL AND DISTRIBUTION LIST**

<b>Prepared by:</b>	<b>Checked by:</b>
 <b>Manolito V. Octaviano Jr.</b> Center for Research	 <b>Johanna G. Minglana, LPT</b> Quality Management Office Director
Date: April 4, 2022	Date: April 4, 2022

<b>Concurred by:</b>	<b>Approved by:</b>
 <b>Rachel Edita O. Roxas, PhD.</b> Vice President for Research and Development	 <b>Renato Carlos H. Ermita, Jr., Ph.D.</b> President
Date: April 4, 2022	Date: April 4, 2022

<b>DISTRIBUTION LIST</b>	<b>COPY</b>	<b>RECEIVED</b>
Quality Management Office	Original	
Office of the President	Copy 1	
Office of the Vice-President for Research and Development	Copy 2	
Center for Research	Copy 3	
Center for Innovation and Entrepreneurship	Copy 4	
Center for Resilient Philippines	Copy 5	
All campuses	Copy 6	

Date of Effectivity	4 April 2022	Control Mark	Page 3 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## TABLE OF CONTENTS

Manual Version Control Log

Manual Approval and Distribution List

Foreword

List of Abbreviations

Chapter 1 Research and Development as Part of National University's Plan

- A. Center for Research
- B. Center for Innovation and Entrepreneurship
- C. Center for Resilient Philippines

Chapter 2 National University Research Agenda

- A. Research Goals
- B. Research Themes
- C. Research Disciplines

Chapter 3 College and Campus Research Agenda

- A. College of Education, Arts and Sciences (CEAS)
- B. College of Business and Accountancy (CBA)
- C. College of Architecture (COA)
- D. College of Engineering (COE)
- E. College of Computing and Information Technologies (CCIT)
- F. College of Allied Health (CAH)
- G. College of Dentistry (COD)
- H. College of Tourism and Hospitality Management (CTHM)
- I. NU MOA
- J. NU Philippines

Chapter 4 The University Research and Development Council (URDC)

Chapter 5 Research As Defined By The College Faculty Ranking And Classification System

Chapter 6 Types of Research Projects

Date of Effectivity	4 April 2022	Control Mark	Page 4 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

- A. Types of Researches
- B. Commissioned Research Projects
- C. Specially Funded Research Projects
- D. Internally Funded Research Projects
- E. Externally Funded Research Projects
- F. Professorial Chairs
- G. Publication Criteria and Incentives

## Chapter 7 Journal of Sciences, Technology, And Arts (JSTAR)

### Chapter 8 Research Policies

- A. General Research Policy
- B. Research Grants
- C. Research Outputs
- D. Contractual Obligations of Researchers and National University

### Chapter 9 Intellectual Property Policy

- A. Purpose
- B. Coverage of Policy Provision
- C. Definition of Terms
- D. Disclosure Requisites
- E. Administration of the Policy
- F. Ownership of Trade Marks
- G. Ownership of Copyright
- H. Ownership of Patent
- I. Distribution of Income from Intellectual Property
- J. Resolution of Disputes
- K. Penalties
- L. Amendments
- M. Waiving of Intellectual Property Policy
- N. Repealing Clause

### Chapter 10 Authorship Policy

- A. Purpose
- B. Coverage of Policy Provision
- C. Definition of Terms
- D. Guidelines

Date of Effectivity	4 April 2022	Control Mark	Page 5 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

- E. Publication and Dissemination of Research
- F. Annual Research Report
- G. Research Recognition

Chapter 11 General Ethical Guidelines for National University Research

- A. University Ethics Review Committee
- B. Policy on Ethics
- C. Research Misconduct

Chapter 12 Online Processing

Date of Effectivity	4 April 2022	Control Mark	Page 6 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## FOREWORD

### Welcome to the National University!

National University has prepared this Manual to provide an overview of its policies, processes and regulations for the conduct of research in the university. It will familiarize the constituents with important information about National University's Research and Innovation, as well as provide guidelines for the conduct of efficient and ethical researches within NU Manila and other NU campuses, collectively called NU Philippines (or NU Phil).

Please understand that this Manual cannot be construed as a legal document. It provides general information governing the monitoring of National University Research agenda and contracts, and is neither an expression or an implied contract. Moreover, it is not a substitute for sound management judgment and discretion.

It is obviously not possible to anticipate every situation that may arise in the campus or to provide information that answers all issues. Thus, circumstances will undoubtedly require that policies and regulations, practices and guidelines described in this Manual change from time to time. Accordingly, National University reserves the right to modify, supplement, remove or revise any provision in this Manual as it deems necessary or appropriate in its sole discretion with or without notice.

If any statement in this Manual is not clear, please check with your immediate superior for clarification. Should you find some items in this Manual that you believe can be improved for the better delivery and understanding of every employee in National University, we welcome your comments and suggestions.

This Manual supersedes any and all prior policies, procedures, and manuals of National University as stated in the Manual Control Version Log.

**The Office of the Vice President for  
Research and Development**  
National University

Date of Effectivity	4 April 2022	Control Mark	Page 7 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## LIST OF ABBREVIATIONS

1. NU National University
2. NU CentRES National University Center for Research
3. NU CentIE National University Center for Innovation and Entrepreneurship
4. NU CRP National University Center for Resilient Philippines
5. URC/UIEC University Research Coordinator/Univ Innovation & Entrep Coordinator
6. CRC College Research Coordinator / Campus Research Coordinator
7. CCRC College Center Research Coordinator
8. ASP Academic/Administrative Support Personnel
9. ASEAN Association of South East Asian Nations
10. CEAS College of Education, Arts and Sciences
11. CBA College of Business and Accountancy
12. COA College of Architecture
13. COE College of Engineering
14. CCIT College of Computing and Information Technologies
15. CAH College of Allied Health
16. COD College of Dentistry
17. CTHM College of Tourism and Hospitality Management
18. CommRP Commissioned Research Project
19. SFRP Specially Funded Research Project
20. IFRP Internally Funded Research Project
21. EFRP Externally Funded Research Project
22. IP Intellectual Property
23. CFP Call for Proposal or Call for Paper
24. MOA Memorandum of Agreement
25. MOU Memorandum of Understanding
26. MOC Memorandum of Cooperation
27. TOR Terms of Reference
28. VPRnD Vice President for Research and Development

Date of Effectivity	4 April 2022	Control Mark	Page 8 of 60
Supersedes	None		





<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

- |             |   |
|-------------|---|
| 29. CHED    | Commission on Higher Education  |
| 30. PAASCU  | Philippine Accrediting Association of Schools, Colleges and Universities        |
| 31. PACUCOA | Philippine Association of Colleges and Universities Commission on Accreditation |
| 32. FDP     | Faculty Development Plan  |
| 33. RA      | Republic Act  |
| 34. UERC    | University Ethics Review Committee  |
| 35. NU      | National University Research Council  |

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 9 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## CHAPTER 1

### RESEARCH IN NATIONAL UNIVERSITY'S VISION AND MISSION

As a central tenet of the National University (NU) vision and mission, research is intended to complement and invigorate teaching, and collectively support the preservation, dissemination, and advancement of knowledge for the betterment of society on the basis of good scholarship. Equally relevant in this context is the utilization of such knowledge and of innovative ideas consequently proceeding from it for the development of beneficial tangible and non-tangible outputs to nation building. National University also recognizes the collective synergy through collaboration with the Main campus, other separate NU campuses (collectively called NU Philippines or NU Phil), and other academic institutions in consortium agreements with NU.

Research in National University supports the ARC (Academic Research Community Engagement) framework of the University that closely integrates, whenever and where ever possible, the Academic, Research and Community Engagement endeavors into one significant whole.

The University has established university-wide research centers to focus on specific goals with the intent of providing a formal forum for multi and trans-disciplinary strategies and activities within the National University community. These centers include:

- Center for Research
- Center for Innovation and Entrepreneurship
- Center for Resilient Philippines

The approved research budget is appropriately allocated among the colleges based on the number of full-time faculty members.

The Colleges and Campuses may also submit proposals for the formation of College-based research and innovation centers based on the core competencies of the College/Campus, but can be tapped to cater to the needs of the University constituency.

#### A. CENTER FOR RESEARCH

As National U endeavors to become a leading institution in advancing concepts and paradigms applicable to research and responsive to the development of national and global needs, it sets up a Center for Research to serve as its research arm in doing the following:

1. Establishing NU as a center of excellence in research.
2. Supporting the further development of a research culture.
3. Broadening the development of the research capacity of NU across all disciplines and extending the research-based knowledge to the national and international communities.
4. Encouraging and empowering faculty members to manage, conduct, disseminate, and report research results.

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 10 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

5. Establishing procedures to manage and use research resources effectively, efficiently, and fairly.
6. Enhancing the quality of student research activity.
7. Encouraging the research-teaching nexus.
8. Improving the quality of outputs, including their impact, level of accountability, and timeliness of reporting.
9. Providing a structure for continual improvement of research and development.

## B. CENTER FOR INNOVATION AND ENTREPRENEURSHIP

**Rationale:** In line with the Philippine government's aim at uplifting the Philippine standing in terms of Innovation, National University, as an academic institution must contribute to the **creation of new ideas** that result in the development of new or improved products, processes, business models, or services which are then spread, transferred or commercialized, which creates social, economic, or environmental impact.

**Mission:** Center for Entrepreneurship promotes innovation and entrepreneurship across the NU community by uplifting the strength in multidisciplinary field.

**Vision:** Center for Entrepreneurship envisioned to be an inclusive, realistic and collaborative community.

The Center of Entrepreneurship is the vehicle of National University in the creation of a *Leading Innovation Culture* within the University, wherein creative individuals in an organization are motivated not only to achieve their **fullest potential as individuals**, but to do so in a way that **creates wealth and value for all stakeholders**. Ultimately, the Center will facilitate the innovation process of bringing the idea to market. The intention of the center is aligned with NU strategic intent which includes competency to succeed as an entrepreneur through continuous strengthening of research capability of all stakeholders. The resources such as time and money spent for research and development is already an equity for a potential commercializable products, services and business models. It is envisioned to have a pool of inventors-turned-entrepreneurs emerging from the grassroots, rich collection of Intellectual Property Assets and Start-ups. Mind-setting and paradigm shifting is necessary to transform ideas into economically benefitting ventures.

The Center will address various local and global challenges and thus shall play a vital role in aligning its programs to the Philippine Development Plan, Executive Order No.5 Ambisyon Natin 2040, Philippine Industry Roadmap, United Nation's Sustainable Development Goals (SGD) and Industry 4.0. NU must be competitive and at par with the innovation initiatives of other Higher Education Institution. The Center will employ and adhere to existing laws in order to effectively manage resources, human capital and knowledge generation and transfer.

The functions of the Center are:

- a. Build and sustain the "Leading Innovation Culture"
- b. Project Evaluation in terms of technical and market viability

Date of Effectivity	4 April 2022	Control Mark	Page 11 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

- c. Funding-assistance based on Technology Readiness Level (TRL), through IFRPP, such as Intellectual Property (IP) Filing, Prototype Improvement, Technology Validation, Field/Testing, Creative Output
- d. Establish Support Eco-System (Government, Industry, Community, Angel Investors, Venture Capitalists, Enablers, Accelerators, Mediators)
- e. IP management such as Review / Draft / Implement IP Policy, facilitate agreements, assignments and technology transfers; IP Incentives; IP Valuation and IP Prosecution Representation
- f. Design and implement Institutional Innovation Programs
- g. Trainings and Advisory
- h. Creation of Technology Experts /Skills Inventory/ Pool as the Innovation Core
- i. Manage Entrepreneurship and Technopreneurship Courses offered across all Colleges.

### **The Entrepreneurship Core**

The Entrepreneurship Core will be a team of NU constituents, who will work closely with the Center.

The objectives of creating the Entrepreneurship Core are:

- a. Assist the community with the innovation processes (idea-to-market)
- b. Serve as a venue for multi-disciplinary and multi-level collaboration beyond the classroom environment
- c. Lead the establishment of innovation sub-center niches
- d. Develop skills-based and competency-based innovation of NU
- e. To build champions in the field of innovation (Administrators, Project Leaders, Entrepreneurs, Unicorns).

The members of the Entrepreneurship Core will have the following benefits: Personal and professional development (self-satisfaction through a paradigm-shift); Institutional support (support eco-system); and, Creation of personal and organizational wealth (Financial Freedom through Profit-sharing scheme).

Commitment to accomplish in the next 3 years:

1. Attain the new KPIs of the Center such as:
  - a. No. of Start-ups
  - b. No. of industry-based and community-based projects
  - c. No. of institutional projects
2. Open a Self-sustaining Innovation Center
3. Establish technology niches
4. Establish new laboratory
5. Formulate trade/ special / graduate degree course on innovations and entrepreneurship

### **C. CENTER FOR RESILIENT PHILIPPINES**

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 12 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

The Center for Resilient Philippines (CRP) is a multi-disciplinary institution committed to improving the country's ability to plan for and recover from, natural and man-made disasters and disruptive events without compromising long-term prospects for development. The CRP offers an integrated, whole-of-nation, ICT enabled resilience effort that is based on a better understanding of the risk environment and disaster impacts, partnerships and shared responsibility, and adaptive and empowered communities.

With the advent of natural disasters and calamities in the country recently, there is an imperative for academic institutions to take part in the development of resilient communities in the Philippines. CRP is National University's contribution to its vision of nation building. It is in support of the government's National Resilience Council, National Disaster Risk Reduction Management, to name a few.

CRP strengthens the core value of National University of resilience in character during difficult times.

CRP supports National University's Academic, Research and Community Engagement (ARC) framework where academic, research and community engagement endeavors are integrated into one framework. This is where the university's constituents engage in research and CE activities in their academic undertakings.

CRP is the University's contribution from an academic institution to UNDRR's movements in building sustainable communities in support of the initiatives of SM.

As one of the leading academic institutions in the field of Information and Communication Technology, National University sees its contribution in the development of digital-based solutions that are useful and meaningful for the community as one of its key areas.

## OBJECTIVES

The objectives of the Center for Resilient Philippines are:

- Innovate and conduct real world, rigorous, timely and appropriate research on resilience, with focus on using technology to enhance resilience
- Contribute to the development of new programs and projects on resilience
- Work with communities in managing the risks that they confront with;
- Develop the capacity of government (at all levels), civil society organizations, communities, the private sector and other stakeholders in disaster risk reduction and management, climate change adaptation, continuity management and other aspects of resiliency; and
- Provide strategic advice and science-based policy recommendations to policy makers and implementors.

Apart from the research and training, the CRP advocates for a resilient Philippines through the use of technology as one of the key areas. It seeks to establish potential networks and linkages for collaboration in teaching, research and engagement both for the faculty members and students of the university, nationally and internationally.

Date of Effectivity	4 April 2022	Control Mark	Page 13 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## CORE COMPETENCIES

The Center for Resilient Philippines identified the following competencies which include (but is not limited to):

- Disaster resilience from the perspective of the social/political, economic and physical sciences;
- New technology-enabled mechanisms to input planning and design solutions that help create a resilient community, including improved disaster resilience through social media interaction;
- Development of innovative national and local resilience policies and practices;
- Private sector engagement in the development of disaster resilience;
- Capacity building for disaster mitigation and reconstruction;
- Networking with academic community; and
- Community engagement and participation in reconstruction, including social impact of reconstruction; empowerment of women and other vulnerable groups; role of women in mitigating and managing disasters.

Date of Effectivity	4 April 2022	Control Mark	Page 14 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## CHAPTER 2

### NATIONAL UNIVERSITY RESEARCH AGENDA

The Office of the Vice President for Research and Development provides the overall direction of the research and development targets, strategies and activities of the University, and functions as the University liaison to the global research arena, guided by the National University Research Agenda. NU Philippines (or NU Phil) which includes other NU campuses and NU affiliates with consortium agreements with NU may consider the NU research agenda as their basis for formulating their own, considering the regional directions and targets of their respective localities.

#### A. RESEARCH GOALS

1. To recruit, develop, and retain faculty researcher s to advance the research mission-vision of National University and all its affiliated campuses;
2. To provide a proactive, responsive, and friendly service to the academic community on research-related endeavors;
3. To assist faculty researchers in publishing research outputs in top international journals;
4. To assist faculty researchers in obtaining and managing externally funded research projects;
5. To foster collaboration and linkages with local and international higher education institutions;
6. To provide financial support for faculty and non-teaching personnel conducting researches;
7. To incorporate intellectual property (IP) concepts in the conduct of innovative researches to ensure generation of patents, utility model, industrial design, and copyright.
8. To strengthen linkages with the industry, government agencies, and community in terms of technology and resource sharing to a more effective, efficient and productive research process.
9. To adhere and align research projects with the developmental plan and national research agenda of the Philippine government such that of the Commission of Higher Education (CHED), Department of Science and Technology (DOST), National Economic Development Authority (NEDA), UN-SDG
10. To engage in research that will improve the quality of life of the community and the preservation of culture and the environment.
11. To utilize research output through publications in both local and international research bodies, technology transfers, and commercialization.
12. To prioritized technology-based, community-based and industry-oriented research undertakings.
13. To serve as benchmark in the regional and national research setting.

#### B. RESEARCH THEMES

THEMES	DESCRIPTION
--------	-------------

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 15 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

Food, nutrition, and health	This strand refers to studies that focus on mitigating issues in food security, ensuring food safety, and promoting health more particularly in marginalized societies. This theme is generally multi-disciplinary which draws expertise from various fields such as sciences, humanities, political science, business, medicine, engineering, and natural sciences.
Emerging Industries on the Fourth Industrial Revolution	New or restructured industrial sectors, growing at a rate faster than the overall economy such as Energy, Engineering, ICT and others that leads to disruption.
Development of vaccines and diagnostic kits using indigenous materials	This strand refers to studies that emphasize the country's preparedness on the emerging diseases such as Corona Virus and reemerging diseases through the development of vaccines and diagnostic kits using indigenous materials.
Disaster risk management	This strand refers to studies that emphasize the country's preparedness on disasters by formulating policies, initiating community development activities, and promoting public awareness.
Tourism and Pollution control	This strand refers to studies that aim to mitigate environmental degradation, environmental protection and promote local tourism.
Climate change specifically on the issue of global warming	This strand refers to studies that promote technology transfer, mitigation, adaptation, and resource utilization in relation to climate change.
Sports Technology	This strand refers to studies that aim to promote wellness through digital, wearable and simulator technologies.
Education and learning innovations	This strand refers to the movement from the teaching and learning system of the 20 <sup>th</sup> century to the teaching and learning system of the 21 <sup>st</sup> century. Areas of research include but not limited to access to education and instructional materials, ICT integration, curriculum innovations, personalized learning, system development, and development of new learning outcomes.
Business sophistication	Development of innovative business models to promote economic progress.

## C. RESEARCH DISCIPLINES

1. Science and Mathematics
2. Education and Teacher Training
3. Health and Health Profession

Date of Effectivity	4 April 2022	Control Mark	Page 16 of 60
Supersedes	None		





<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

4. Information and Communications Technology
5. Engineering, Maritime and Architecture
6. Agriculture
7. Environmental Science
8. Humanities
9. Social Sciences
10. Theoretical Research

Date of Effectivity	4 April 2022	Control Mark	Page 17 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

### CHAPTER 3 COLLEGE RESEARCH AGENDA

The academic units of National University, the other separate NU campuses and affiliates guided by consortium agreements with NU, define their specific research agenda, consistent with the overall research agenda of the University.

#### a. COLLEGE OF EDUCATION, ARTS AND SCIENCE (CEAS)

The College of Education, Arts and Sciences envisions itself to be a dynamic, receptive and innovative institution leading the frontiers of research. It hopes to generate research outputs that are of value to policy making, curricular improvement, and innovation in all levels of education in the country.

##### 1. College Research Goals

Specifically, this College shall commit itself to achieving the following goals:

- a. Improve the research capability of the College's faculty researchers toward global competitiveness;
- b. Increase the research productivity of the College across disciplines;
- c. Spearhead innovations and produce knowledge that are contributory to social and educational advancement;
- d. Facilitate the dissemination and utilization of research findings

##### 2. Strategic Activities

To achieve the research goals and produce the target research outputs, the following strategic activities will be implemented:

- a. The College shall provide research capability building programs such as travel grants, research grants, statistical and data management assistance, graduate scholarships, and research seminars.
- b. The CEAS shall strengthen the conduct of research in the graduate and undergraduate programs related to priority disciplines.
- c. The CEAS shall commission a multidisciplinary research on the priority disciplines and themes.

##### 3. Research Disciplines

- a. Science and Mathematics
- b. Education and Teacher Training
- c. Psychology
- d. Humanities and Social Sciences
- e. Language Education

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 18 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

#### **4. Research Sub-themes**

##### *Holistic Well Being*

- a. Positive Psychology
- b. Industrial Psychology
- c. Clinical Psychology

##### *Education and Learning Innovations*

- a. Education Psychology
- b. Special and Inclusive Education
- c. Curriculum and Program Development
- d. Blended Learning
- e. Contexts and Content in Education

##### *Literacy, numeracy and civic competencies in local fora to the global landscape.*

- a. Philippine English
- b. Pragmatics
- c. Phonology and Morphology
- d. Attitudes towards STEM
- e. Effective Assessment and Teaching STEM
- f. Process of Instruction
- g. Youth Movement and Participation
- h. Securitization in Asian Contexts
- i. Rizal in the highly globalized world

#### **b. COLLEGE BUSINESS AND ACCOUNTANCY (CBA)**

The College of Business and Accountancy (CBA) envisions itself to be a research center that produces theory-led, applicable research that addresses contemporary organizational and management challenges faced by businesses, public organizations, regulatory bodies, and policy-makers.

##### **1. College Research Goals**

Specifically, this College shall commit itself to achieving the following goals:

- a. Improve the research capability of the College's faculty researchers toward global competitiveness;
- b. Increase the research productivity of the College across disciplines;
- c. Spearhead innovations and produce knowledge that are contributory to social and educational advancement;
- d. Facilitate the dissemination and utilization of research findings

Date of Effectivity	4 April 2022	Control Mark	Page 19 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## 2. Strategic Activities

To achieve the research goals CBA will be focused on creating and sustaining a supportive, collaborative, and vibrant research culture by raising the quality and quantity of our research output through the continuous development of faculty and exposure to business issues.

Practitioner engagement is a major emphasis of the Business School. In addition to dissemination in academic and practitioner journals, each research group runs a variety of activities with the aim of providing a broad base of accessible evidence for practitioner-oriented activities.

## 3. Research Disciplines

### a. Management

- i. Mergers and acquisitions
- ii. Leadership
- iii. Ethical climate and culture
- iv. Innovation
- v. Organizational justice
- vi. Stakeholder theory
- vii. Corporate governance
- viii. Job satisfaction

### b. Accountancy

- i. the role of accounting information in decision making generally and in capital markets in particular;
- ii. the modeling of corporate failure and credit risk;
- iii. corporate takeovers and reconstructions;
- iv. corporate governance;
- v. accounting standard setting, particularly the role of international financial reporting standards;
- vi. market price accounting;
- vii. environmental and social reporting;
- viii. public sector accountability and financial reporting.

## 4. Research Sub-themes

- a. Corporate Governance and Shareholder Values, Models for Evaluating Corporate Responsibility
- b. Drivers and barriers to competitiveness of human resources in industries and service sectors
- c. Accountability and performance measurement applied to a range of private, public and non-profit organizations
- d. Community Development And Social Sustainability
- e. Competitive Intelligence in sales

## c. COLLEGE OF ARCHITECTURE (COA)

Date of Effectivity	4 April 2022	Control Mark	Page 20 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

The College of Architecture seeks to be innovators and stewards of the environment thru design and construction of 21st century sustainable and green buildings. This goal is to produce Nationalians who will be equals in the global arena of architecture and innovators in whatever field of architecture they choose to partake in.

### 1. College Research Goals

Specifically, this College shall commit itself to achieving the following goals:

- a. To Produce Nationalians who will be part in the local and global arena of Architecture through research:
- b. To endeavor research to promote good and green architecture
- c. To utilize research as a vital tool in architectural design process
- d. To conduct research of 21st new technologies that will provide innovative work

### 2. Strategic Activities

To achieve the research goals and produce the target research outputs, the following strategic activities will be implemented:

- a. The College shall provide/facilitate research capability building programs such as travel grants, research grants, statistical and data management assistance, graduate scholarships, and research seminars.
- b. The College shall strengthen the conduct of research in the undergraduate programs related to priority disciplines.
- c. The College shall commission a multidisciplinary research on the priority disciplines and themes.
- d. The college will host or co host a research forum every academic year
- e. The college shall Produce 3 or 4 internally funded research of the faculty members
- f. The college shall encourage its fulltime faculty members to present research works to local and international conferences

### 3. Research Disciplines

- a. Science and Mathematics
- b. Education and Teacher Training
- c. Information and Communication Technology
- d. Engineering and Architecture
- e. Environmental Science
- f. Humanities

Date of Effectivity	4 April 2022	Control Mark	Page 21 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

g. Social Sciences

#### 4. Research Sub-themes

- a. Architectural Education and Learning Innovations
- b. Environment, Ecology and Pre Disaster Design Strategies
- c. Culture, Heritage and Filipinism
- d. Participative Community Planning
- e. Local and International Networking

#### d. COLLEGE OF ENGINEERING (COE)

The College of Engineering envisions itself to be recognized as a lead contributor of scholarly output and smart solutions in the field of environmental sustainability, disaster risk response and resilience, engineering education, emerging technologies, and other contemporary issues requiring engineering design solution. Thus, bridging community needs, scientific discovery and applications, and instruction.

##### 1. College Research Goals

- a. Increase productivity on research and innovation through collaborative undertakings among faculty members, students and communities;
- b. Revolutionize the approach in engineering research through design education;
- c. Improve the capability of the faculty members on research and design;
- d. Enhance student development on design education leading to research output; and
- e. Focus on user- and community-based design and research.

##### 2. Strategic Activities

To achieve the research goals and produce the target research outputs, the following strategic activities will be implemented:

- a. The College shall provide/facilitate research capability building programs such as travel grants, research grants, statistical and data management assistance, graduate scholarships, and research seminars.
- b. The College shall strengthen the conduct of research and design in the undergraduate programs related to priority disciplines.
- c. The College shall commission a multidisciplinary research on the priority disciplines and themes. d. The college will host or cohost a research forum every academic year.

##### 3. Research Disciplines

- a. Civil Engineering
  - i. Construction Engineering and Management
  - ii. Transportation Engineering
  - iii. Structural Engineering
  - iv. Water Resources Engineering
- b. Computer Engineering
  - i. Systems and Network Administration

Date of Effectivity	4 April 2022	Control Mark	Page 22 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

- ii. Embedded Systems
  - iii. Machine Learning
- c. Electrical Engineering
  - i. Power Systems Protection
  - ii. Renewable Energy
- d. Electronics Engineering
  - i. Microelectronics Engineering
  - ii. Instrumental and Control Engineering
  - iii. Artificial Intelligence
  - iv. Digital Signal Processing
- e. Environmental and Sanitary Engineering
  - i. Water and Wastewater Engineering
  - ii. Public Health Engineering
- f. Mechanical Engineering
  - i. Renewable Energy Engineering
  - ii. HVAC Engineering

#### 4. Research Themes

- a. Environmental Sustainability
  - i. Environmental Impact Assessment, Protection and Conservation
  - ii. Sustainable Materials
  - iii. Solid and Hazardous Waste Management
  - iv. Renewable Energies
- b. Disaster Risk Response and Resilience
  - i. Disaster Response Technologies
  - ii. Flood Hazard and Risk Assessment
  - iii. Watershed Management
  - iv. iv. Resilient Structures
  - v. v. Resilient Homes
- c. Emerging Technologies
  - i. Smart City
  - ii. Smart Agriculture
  - iii. Intelligent Transportation Systems
  - iv. Geographic Information Systems
  - v. Machine and Deep Learning
  - vi. Image, Audio and Video Processing
  - vii. Natural Language Processing
  - viii. Artificial Intelligence
  - ix. Additive Manufacturing
- d. Engineering Education
  - i. Design Education
  - ii. Engineering Epistemologies
  - iii. Engineering Teaching, Learning, Assessment
  - iv. Sustainability in Engineering Education
  - v. STEM Education

Date of Effectivity	4 April 2022	Control Mark	Page 23 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

#### e. College of Computing and Information Technologies (CCIT)

The College of Computing and Information Technologies (CCIT) is envisioned to be an agent for economic growth and a leading industry hub – able to pioneer and direct the development, advancement, preservation, and dissemination of knowledge in the field of Information Technology and Computer Science.

##### 1. College Research Goals

Specifically, this College shall commit itself to achieving the following goals:

- a. Revolutionize and innovate computing research endeavors vis-à-vis with the NU Research Agenda;
- b. Provide solutions to pressing societal and research problems; and
- c. Network with other institutions locally and abroad.

##### 2. Strategic Activities

To achieve the research goals and produce the target research outputs, the following strategic activities will be implemented:

- a. Identify strategic research areas – in coordination with partners in the industry, academe, and government sectors – that would contribute to the society and towards achieving the Millennium Development Goals.
- b. Identify existing avenues for the NU community (i.e., students and faculty members) to enrich research capabilities, link and connect with experts in the field. These avenues include ranked conferences and workshops, and other important research events.
- c. Provide opportunities for the NU Community to produce, disseminate and showcase quality research output. This includes organizing lectures, workshops, seminars, and conferences.
- d. Evaluate, endorse, provide counterpart options, and track externally-funded computing research activities of both students and faculty members.
- e. Connect with experts in the field and maintain a database of funding agencies, local and high impact research avenues.
- f. Formulate academic policies, guidelines, and frameworks that are towards the enhancement of the computing research capability of the NU Community. This includes the transformation of research outputs and funded projects into academic electives for students and community output.

##### 3. Research Disciplines

Building on the existing strength of the students and faculty members, the following are identified as the college's research thrusts:

Information Technology

- a. Games and Multimedia

Date of Effectivity	4 April 2022	Control Mark	Page 24 of 60
Supersedes	None		





<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

- b. Mobile Application Development
- c. Web application Development
- d. ICT for development;
- e. IT Infrastructure.

#### Computer Science

- a. Human Computer Interaction;
- b. Machine Learning;
- c. Computer Vision;
- d. Natural Language Processing;
- e. Digital Signal Processing
- f. Digital Forensics (Mobile, Network, Database, Computer) and Analysis;

#### IT and the Society

- a. Social Sciences
- b. ICT and the Society

### 4. Research Themes

#### Food Nutrition and Health

- a. Remote Medical Consultation
- b. Image Processing for fruit defect detection

#### Environment and Disasters

- a. Mobile Application that introduces Crowdsourcing and awareness
- b. A digital toolkit that can plot disaster-prone areas by classifying and clustering social media feeds.

#### Maternal Health

- a. Mobile / Web Application for Maternal awareness

#### Climate Change

- a. Mobile / Web Application for Climate Change Awareness

#### Education and learning innovations

- a. E-Learning Systems
- b. M-Learning Systems
- c. Intelligent tutoring systems.

#### Cultural heritage

- a. Interactive Game / Virtual Reality / Hologram for heritage learners.
- b. Ontology-building for museums.

#### Governance

- a. E-participation

#### Cybersecurity and Digital Forensics

Date of Effectivity	4 April 2022	Control Mark	Page 25 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

- a. Digital Forensics Education
- b. Digital Forensic Tools

## **f. COLLEGE OF ALLIED HEALTH (CAH)**

The College of Allied Health envisions itself to be globally competitive; engaged in academic and scientific pursuits that contribute to Evidence-Based Practice and Allied Health Care (Nursing Pharmacy, Medical Technology), Education, Research, and Administration. The College of Allied Health also seeks collaboration with other colleges and non-teaching departments of National U to help increase the research productivity, not only of the College, but of the entire University.

### **1. College Research Goals**

Specifically, this College shall commit itself to achieving the following goals:

- a. Contribute to the creation of research culture, innovation, and creativity in the university.
- b. Improve the research capability and involvement of the college faculty researchers toward global competitiveness;
- c. Increase the research productivity of the College;
- d. Spearhead innovations and produce knowledge that are contributory to a quality care specifically to patient safety, improved patient outcomes, socio-cultural, educational and technological advancement;
- e. Facilitate the dissemination and utilization of research findings.

### **2. Strategic Activities**

To achieve the research goals and produce the target research outputs, the following strategic activities will be implemented:

- a. The College shall provide research capability building programs such as travel grants, research grants, statistical and data management assistance, graduate scholarships, and research seminars.
- b. The College shall strengthen the conduct of research in the undergraduate program related to priority disciplines.
- c. The College shall allot a thesis adviser for each group of students doing a thesis. The thesis adviser is preferably an expert in the topic of interest and ideally should not have more than two groups under his/her tutelage.
- d. The College shall include issues about research in each faculty meeting. Such meetings must have the Dean or the Program Chair, along with the Research Coordinator present.
- e. The College shall have at least one full time faculty to be a member of a professional nursing research association or society that is recognized by the only accredited professional nursing organization in the country.
- f. The College shall have provisions that may help facilitate and encourage the conduct of research, that may or may not include, and not limited to, load, financial assistance, favorable

Date of Effectivity	4 April 2022	Control Mark	Page 26 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

workload for research, and a paid day-off (research day) for faculty members engaged in research.

### 3. Research Disciplines

- a. Nursing
- b. Medical Technology
- c. Pharmacy
- d. Medicine
- e. Education
- f. Psychology
- g. Information and Communication Technology
- h. Environmental Science
- i. Humanities
- j. Social Sciences

### 4. Research Sub-themes

- a. Patient Safety
- b. Improved Patient Outcomes
- c. Health Technology
- d. Holistic Care
- e. Socio-Environmental Health Concerns and the Community
- f. Health Education
- g. Leadership and Management
- h. Core Values and Culture
- i. Disaster Risk Management

### g. COLLEGE OF TOURISM AND HOSPITALITY MANAGEMENT (CTHM)

The College of Tourism and Hospitality Management envisions itself to be a partner of community and industry in improving its systems through research orientation. It aims to instill the culture of research among its faculty members and students by tapping the value of research and producing outputs that can contribute to the advancement of the industry and society in general.

#### 1. College Research Goals

Specifically, this College shall commit itself to achieving the following goals:

- a. Improve the research capability of the College's faculty researchers toward global competitiveness;
- b. Increase the research productivity of the College across disciplines;

Date of Effectivity	4 April 2022	Control Mark	Page 27 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

- c. Spearhead innovations and produce knowledge that are contributory to social and educational advancement;
- d. Facilitate the dissemination and utilization of research findings

## 2. Strategic Activities

To achieve the research goals and produce the target research outputs, the following strategic activities will be implemented:

- a. The College shall provide research capability building programs such as travel grants, research grants, statistical and data management assistance, graduate scholarships, and research seminars.
- b. The College shall strengthen the conduct of research in the graduate and undergraduate programs related to priority disciplines.
- c. The College shall commission a multidisciplinary research on the priority disciplines and themes.

## 3. Research Disciplines

- a. Specific Tourism and Hospitality Industry Disciplines
- b. Humanities and Social Sciences
- c. Business Management
- d. Environmental Science
- e. Geography
- f. Foreign Relations
- g. Education and Training
- h. Information and Communications Technology

## 4. Research Sub-themes

### Destination Development, Promotion and Marketing

- a. Tourism Assessment
- b. Tourism Planning and Development
- c. Destination Marketing and Promotions

### Sustainable Development in Tourism and Hospitality Industry

- a. Tourism and Hospitality Industry Impacts (Socio-Cultural, Economic and Environmental).
- b. Sustainable Development Goals

### Community and Cultural Pride, Inclusivity and Accessibility

- a. Cultural and Heritage Preservation and Promotions
- b. Inclusive and Accessible Tourism

### Service Quality and Delivery

Date of Effectivity	4 April 2022	Control Mark	Page 28 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

- a. Service Quality Assessment
- b. Service Quality Improvement

#### Hospitality Enterprise Operations and Management

- a. Hospitality Operations and Management
- b. Culinary Arts

#### Tourism and Hospitality Industry 4.0

- a. Digitization and Automation
- b. Industrial Revolution
- c. Technological Utilization

#### Contemporary Trends and Updates

- a. Tourism and Hospitality Trends and Updates
- b. Contemporary Tourism

## h. NU MOA

### **COLLEGE OF DENTISTRY (COD)**

The College of Dentistry envisions itself to be one of the revered institutions of higher learning. It aims to pursue excellence in an academic environment enriched by faculty and students who are professionally responsive to the progressive trends in Dentistry.

#### **1. College Research Goals**

Specifically, this College shall commit itself to achieving the following goals:

- a. Improve research capability of the College's faculty researchers toward global competitiveness;
- b. Increase research productivity of the College across disciplines;
- c. Spearhead innovations and produce knowledge that are contributory to social and educational advancement;
- d. Facilitate the dissemination and utilization of research findings

#### **2. Strategic Activities**

To achieve the research goals and produce the target research outputs, the following strategic activities will be implemented:

- a. The College shall provide research capability building programs such as travel grants, research grants, statistical and data management assistance, graduate scholarships, and research seminars.

Date of Effectivity	4 April 2022	Control Mark	Page 29 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

- b. The College shall strengthen the conduct of research in the undergraduate programs related to priority disciplines.
- c. The College shall commission a multidisciplinary research on the priority disciplines and themes.

### **3. Research Disciplines**

- a. Health and Health Profession

### **4. Research Sub-themes**

- a. CBCT vs Panoramic, Cephalometric, Occlusal, and Periapical radiograph (analog)
- b. Curing time of common LED light cure units
- c. Determining the bone density of Filipinos
- d. Comparison of the Compressive Strengths of different Composite materials

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 30 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

#### **CHAPTER 4**

#### **THE NATIONAL UNIVERSITY RESEARCH COUNCIL**

The National University Research Council is advisory to the University President on matters relating to research. It is composed of the Executive Vice President, Vice President for Research and Development, NU Centers for Research, Center for Innovation and Entrepreneurship, and Center for Resilient Philippines Directors, and Academic Directors of the other NU campuses in NU Phil and other affiliates guided by consortium agreements with NU.

The Council will hold a meeting every fourth Thursday of the month.

The primary functions of the Council are as follows:

1. Formulates research policies and agenda
2. Reviews and evaluates National University campus-wide research proposals
3. Oversees the implementation of university research ethics guidelines
4. Conducts an annual review of research programs

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 31 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## **CHAPTER 5**

### **RESEARCH AS DEFINED BY THE COLLEGE FACULTY RANKING AND CLASSIFICATION SYSTEM**

Research and innovation outputs of faculty members are now integral in the ranking and promotion of NU faculty members. The evaluation of such outputs are based on existing global and regional databases and abstracting services, and which are clearly stipulated in the NU Faculty Manual.

A particular cluster of productive scholarship indicators such as completed research output, paper presentation, output utilization (publication or commercialization) is required. The faculty member is expected to do research primarily in aid of instruction (i.e., her/his instruction is research based and/or enriched by research), community / industry engagement, IP generation or for start-up. The research outputs should not be limited to the following: action research or participatory action research, policy and project/program review and evaluation which are regional in scope); treatise; and empirical/experimental research. Each output is awarded a raise in a professional rank according to the criteria set by the present research manual.

For paper presentations, a higher requirement (e.g. Scopus or ISI Indexed Publications) can satisfy a lower requirement (e.g. Paper Presentation, completed IFRPP), but any number of the lower requirement (e.g. Paper Presentation, completed IFRPP) cannot replace a higher requirement. For IP generation, a higher requirement (e.g. patent) can satisfy a lower requirement (e.g. utility model), but any number of the lower requirement (e.g. industrial design or trade secret) cannot replace a higher requirement.

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 32 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## CHAPTER 6 TYPES OF RESEARCH PROJECTS

### A. TYPES OF RESEARCH

Research in NU is focused on three major types: fundamental research, applied research, and experimental development.

1. Fundamental research refers to pure basic research or to strategic basic research. Pure basic research is experimental and theoretical work undertaken to acquire new knowledge without looking for long-term benefits other than the advancement of knowledge. Strategic basic research is experimental and theoretical work undertaken to acquire new knowledge directed to specified broad areas in the expectation of useful discoveries. It provides the broad base of knowledge necessary for the solution of recognized practical problems.
2. Applied research is original work undertaken primarily to acquire new knowledge with a specific application in view. It is undertaken either to determine possible use for the findings of basic research or to determine new ways of achieving some specific and predetermined objectives.
3. Experimental development is systematic work, using existing knowledge gained from research or practical experience that is directed to producing new materials, products, or devices; to installing new processes, systems, and services; or to substantial improvement of already produced or installed systems.

Overall, NU shall invest and give equal emphasis to all the above types of research in terms of resources and time allocation. Nonetheless, NU also provides resources for creative works and other forms of IP.

### B. COMMISSIONED RESEARCH PROJECT (CommRP)

CommRP refers to a project, which has been recommended or initiated by the Office of the National University President or the President's Council. The President can directly assign or commission an academic teaching faculty, an academic service faculty, or a support staff to do a CommRP. Research proposals for CommRP should fall under the research priority areas of NU.

CommRP will follow the forms of IFRPPs. All standard protocols for IFRPPs will be applied, except for the usual endorsements from CRC, PC and Dean, and the process of deliberation. Endorsement and approval will be solely undertaken by the NU President. Once approved by the NU President, the concerned NU units (the CRC, PC and Dean for faculty member proponents) will be provided a copy of the approved CommRP proposal.

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 33 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

### C. SPECIALLY FUNDED RESEARCH PROJECT (SFRP)

SFRP refers to any of the following:

1. A product of a formal agreement between National U and government or non-government institutions.
2. A fast-track project meant to be undertaken as soon as possible to give solution to an urgent problem.

Research proposals for SFRP should fall on research priority areas agreed by the aforementioned institutions; or addresses an obvious emergency situation.

Research proposals for SFRP must follow the following guidelines in carrying it out.

1. Members of the NU faculty and ASP who are interested to apply for SFRP should look for co-researchers from partner institutions preferably from the consortium institutions. For fast-track projects, researchers can partner with internal and external proponents to ensure that the needed expertise are met.
2. Members of the NU faculty and ASP with identified co-researchers can apply for SFRP by expressing their intention in writing to the Center for Research Director.
3. The research proposal for internally funded SFRP shall be reviewed for its form and substance by two evaluators: one from NU and one from the partner institution/s or any identified expert; and for its ethical value by the University Ethics Review Committee.
4. The researchers of internally funded SFRP shall follow the existing guidelines set by their respective institutions.
5. The research proposal for externally funded SFRP shall no longer be subjected for review by the evaluation committee of the partner institutions. The proponents shall follow the guidelines set by the funding agency if EFRP; and must conform with NU guidelines if IFRP.

### D. INTERNALLY FUNDED RESEARCH PROJECT (IFRP)

Internally funded research project proposals should be based on the Research Agenda of NU and its colleges. Ideally, a proponent is allocated with seed fund to jump-start a research interest and develop research capability aligned with the applicant's long-term development plan. NU aims to facilitate and foster research and has created a set of guidelines to achieve this goal with respect to funding packages. Multi-disciplinary collaborative proposals are highly encouraged. The proposal must be reviewed and endorsed by the Program Chair or Immediate Supervisor, CRC (College/Campus Research Coordinator) and the Dean of the College or Academic Director where the proponent/s belong.

It is a requirement that the output of the IFRP must be published or qualify with the criteria for IP filing. It is ideal that the internal funding results in research proposals submitted to outside research funding agencies and, ultimately, successful external funding of the faculty members' research activities. Research funding may come from a number of internal budget centers including the Center for Research. When

Date of Effectivity	4 April 2022	Control Mark	Page 34 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

funds become available, faculty members and ASP may apply for support by filling out an IFRP Proposal Form. This is competitive in nature and must fall under one of NU's priority research areas. Although applied research leading to tangible technologies shall be given priority, upstream basic research shall not be overlooked. An appropriate share of research funding shall be reserved to support such activities. NU may provide seed money to support any of the following: research project, research program (composed of 2 more projects), manuscript writing, review paper (narrative/ meta-analysis report), creative output, materials development, pre-commercialization requirements such as IP application, prototype improvement, filed testing and technology validation. This will be determined through a technical and market evaluation to be conducted by representatives from the CentIE Core.

NU support may include financial support and research load. Refer to section 8.2c on number of allowable simultaneous ongoing projects and research load.

There will be strict compliance on the research expected outputs such as: publications (published aspect of the research, or the whole of it, in a scientific journal for peer review); patents (proprietary invention or scientific process for potential future profit); products (invention with a potential commercialization); people services (people or groups of people, who receive technical knowledge and training); places and partnerships (linkage forged because of the study); policies (science-based policies crafted and adopted by the government or academe as a result of the study); social impact; and economic impact.

The criteria for a Lead Proponent (or Project Leader) for IFRPPs are:

1. Fulltime faculty member
2. ASP that satisfies the following:
  - a. Regular Employee
  - b. Any of the following:
    - i. Was a co-proponent in any previous research project in NU
    - ii. With previous research experience outside NU
    - iii. With Masters Degree
  - c. Attended trainings given by Center for Research

External Collaborators are allowed to be a co-proponent, especially if his/her expertise is needed in a project. An agreed honorarium is given to the collaborator.

#### **E. EXTERNALLY FUNDED RESEARCH PROJECT (EFRP)**

Institutional Externally Funded Projects include the following:

1. Research projects contracted by an external funding organization with NU;
2. Research projects made with a contract on memoranda of agreement between NU and the funding organization; and
3. Research projects that are officially awarded to NU, with the premise that: (a) an individual faculty member or ASP act as Project Leader or Collaborator; (b) endorsed by the NU University President; and, (c) funds course through NU Finance Department, whenever NU is the Lead Institution.

Date of Effectivity	4 April 2022	Control Mark	Page 35 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

A grantee is a full-time faculty member and has completed at least one internally funded or, if the funding agency requires, externally funded research project. He/She must not however, engage in two on-going internally funded research projects except in meritorious cases where he had proven a track record.

As a general rule, the National University (NU) shall adhere to the conditions stipulated in the contract between the funding agency and the NU proponents. Consequently, it is the policy of the funding agency that will be followed. In case the funding agency policy is silent on a particular matter, the policy of the University shall govern.

#### General Requirements:

1. The project must be aligned with the research thrust of NU.
2. Counterpart funding can be provided by NU through its research proposal program.
3. A management fee or other administrative cost of at least 7.5% shall be included in the research proposal for administrative services and use of university facilities and resources. It will be distributed using the following scheme:
  - 10% for the research center (in the absence of a center, it will go to the college);
  - 25% for the college;
  - 35% for the research fund (CentRES); and
  - 30% for the University

It should be noted that the share of the research center and the college is to be used for the faculty research development (e.g., research capacity building programs, proposal writing for external funding, college research projects).

4. In case where fund matching is required from the external funding organizations, such funding maybe requested from the research fund and cost of faculty load subject to the approval of the President's Council.

#### Qualifications for project proponents:

1. Must be a full-time faculty member. Part time faculty members that have taught in the University for at least one year regardless of the credit units may be allowed as co-proponents of a full-time faculty member.
2. Administrators
3. Academic support staff (e.g. admission, libraries, COMEX)

Counter-funding of NU will be in the form of teaching units/ hours load, and use of NU resources. Only institutional EFRP are qualified for counterpart funding. Upon approval of the project proposal by the funding agency, the necessary official communication, contract, memorandum of agreement (MOA), memorandum of understanding (MOU) or Memorandum of Cooperation (MOC) should be prepared.

#### Professional Fee:

Date of Effectivity	4 April 2022	Control Mark	Page 36 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

On top of the researchers' monthly salary, they shall receive honorarium as principal investigator, co-investigator, project leader, or co-project leader. The amount of which shall be based on the approved line item budget in the proposal.

Procedure:

#### Sourcing External Funds

1. Each college research center shall be in charge of establishing linkages with external funding agencies.
2. Faculty proponents shall submit a research proposal to their college research center for preliminary screening and checking of alignment to research agenda.
3. The college research center recommends the research proposal to an external funding agency and provides a copy to CentRES.
4. CentRES can provide assistance in procuring documents needed by the external funding organization (e.g. bank account where the documents will be submitted, SEC registration.)
5. The OVPRnD endorses the research proposal to an external funding agency.

Implementation:

1. A copy of the approved proposal with budget and MOA should be submitted to CentRES for verification.
2. A project account should be opened through the accounting office, facilitated by CentRES.
3. The project leader should oversee the implementation of the project including the use of budget.
4. For checks and balance purposes, the college research center and CentRES will monitor the project implementation. Hence, the project leader may be asked by these offices to submit financial and progress report of the project. Both the college research center and the CentRES will maintain records of expenses and balance.
5. Disbursement procedure shall follow the accounting procedure of the University without prejudice to the procedure of external funding organization. In case there is a conflict between the two procedures, the procedure of the latter shall prevail.
6. The project leader shall inform both the funding agency and the University of the project completion and requests for an audited financial report from the NU Accounting Office. CentRES will facilitate on having the financial report audited and will shoulder the service fee if it is not included in the budget.
7. Any unused savings or unused budget should be returned to the funding agency. However, if there is no need to return the said savings to the funding agency, it shall be distributed using the following scheme:
  - 10% for the research center (in the absence of a center, it will go to the college);
  - 25% for the college;
  - 35% for the research fund (CentRES); and
  - 30% for the University

Date of Effectivity	4 April 2022	Control Mark	Page 37 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

8. All equipment acquired during the implementation shall be surrendered to the funding agencies as they may require or be donated to the University. The project leader, in coordination with CentRES, may specifically identify the office to which the equipment shall be donated. Priority is given to the research center (in the absence of a center, priority is given to the college.)
9. Publication of the project results should be stipulated in the agreement. In the absence of such stipulation and permission to publish the results in other venues, the publication shall use National University as the sole affiliation (in case when there is counterpart funding from the University) and shall acknowledge the funding agency.
10. Faculty members who have completed an externally funded project shall be recognized during the annual research and publication recognition.
11. The faculty researchers may apply for research load through the submission of an IFRPP as counterpart funding of National University to the externally funded project. All the researchers will be subject to all the existing policies of the IFRPP.
12. Certain laboratories/ classrooms, in coordination with ITRO and Facilities will be allotted for the use of externally-funded research projects. The use of facilities shall form part of the match granting. Facilities will provide regular maintenance for classrooms and ITRO for laboratories.
13. The workplace of the proponents and research personnel shall be coordinated by the project leader with CentRES.
14. CentRES will regularly orient the center heads and offices concerned with regard to new projects and policies.

#### **F. PROFESSORIAL CHAIRS**

The selection of Professorial Chairs shall be made every school year during the first week of March by the Office of the VPRD and subsequently announced to the NU community.

The nomination for Professorial Chair may be initiated by the College Deans through their Department Chair. All nominations shall be forwarded to the screening committee headed by CentRES Office Director.

The members of the screening committee and the qualifications of the professorial chair should be in consonance with the specifications made by the donor who established the award as indicated in the Memorandum of Agreement (MOA). The screening committee shall evaluate the qualifications of the nominees based on the qualifications set by the donor. In the event that the donor did not set any qualifications in the MOA and/or no one among the nominees met the qualifications set by the donor, the following minimum qualifications may be applied by the institution:

1. Must at least be an assistant professor;
2. Must have conducted at least one internally or externally-funded research project presented in an institutional or regional forum;
3. Should have at least published one article in a refereed journal within three years prior to nomination; and

Date of Effectivity	4 April 2022	Control Mark	Page 38 of 60
Supersedes	None		





<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

4. Must not have been sanctioned administratively within a year immediately prior to the date of appointment as Professorial Chair.

If a candidate has been chosen, the screening committee shall endorse the name of the candidate to the VPRD who will then endorse the chosen candidate to the NU President for formal appointment, which shall be announced to the academic community on the first week of May of every academic year. The duration of the appointment of the Professorial Chair shall be for one academic year.

The holder of the Professorial Chair may choose among his/her existing completed researches in the last three years, not externally funded, that he/she would present to the College Council that will deliberate and decide on which of the presented researches shall be lectured to the academic community. In this case, the holder of the chair shall only receive a monthly salary topping from the proceeds of the endowment fund.

If the MOA specifies that the holder of the chair do research or no completed research of, the holder qualifies for the prescribed topic by the donor, the Center for Research will subsidize the research expenses of the holder following the procedure below:

1. The research project will undergo proposal deliberation in the same manner as a regular research project.
2. All research expenses incurred in the research project will be shouldered by the Center for Research.
3. A maximum of six (6) units' academic loads research incentive per academic term shall be awarded to the Professorial Chair Holder.
4. The salary/stipend of the Holder will come from the donation of the assigned agency or company while the honorarium shall be paid on a monthly basis.
5. Once subsidized, the completed research project shall be classified as one of the regular research projects of the Center for Research. Thus, it shall be governed by all policies and guidelines by the funding agency. Ownership of the said research project belongs to NU, the donor, and the Chair Holder.
6. the Center for Research shall be in charge of organizing the formal lecture. The Professorial Chairholder should present her/his study by start of each school year. All expenses incurred during the Professorial Chair lecture shall be charged to the endowment fund.

The Professorial Chair Holder should do the following:

- a. Submit an annual report of his/her activities to the donor and to the Center for Research Director;
- b. Deliver a lecture about the results/findings of his/her study in a forum organized by the Center for Research;

Date of Effectivity	4 April 2022	Control Mark	Page 39 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

- c. Submit a copy of the final research report to the VPRD and the Center for Research Director, and the donor

## **G. PUBLICATION CRITERIA AND INCENTIVES**

### **1. Guidelines Rationale**

The goal of guidelines for the accreditation of research journals and publication incentive is twofold:

- a. to increase the number and impact of NU faculty publication in peer-reviewed journals; and
- b. to enhance NU's chance of attaining *CHED publication accreditation* and of attaining the highest accreditation Level 4 of PAASCU/PACUCOA.
- c. to apply for international accreditation

#### **A. Publication Criteria**

Recognized Journals must meet the following criteria:

- i. Category 1: Journals included in the Thomson Reuters Master Journals List of the Institute of Scientific Information (*ISI*).
- ii. Category 2: Journals included in the Scopus Database.
- iii. Category 3: Peer-reviewed journals in any discipline as ranked in [www.journal-ranking.com](http://www.journal-ranking.com) or peer-reviewed journals with the following:
  - *impact factor*
  - *regularity of release and established track record*
  - *contact information displayed on the web page*
  - *strong affiliation to established professional organization*
  - *established and reputable editors and editorial board*
  - *part of IDEAS and RePec files, part of emerald abstract accredited journals, part of science direct accredited journals.*

Journals that fall under this category are considered comparable to international journals.

- A. Category 4: Peer-reviewed journals with good evaluation using the following criteria [adopted from the Commission on Higher Education Memorandum Order 13 series of 2009]:
  - i. Composition and qualifications of the Editorial Board members
  - ii. Recruitment and qualifications of the peer reviewers/external referees
  - iii. Type of refereeing system adopted
  - iv. Overall appearance, timeliness and regularity of release of the journal
- B. JSTAR (see chapter 7).

Journals that fall under this category are considered comparable to national journals.

Date of Effectivity	4 April 2022	Control Mark	Page 40 of 60
Supersedes	None		





<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## 2. Criteria for Incentives

National University provides incentives for research output depending on their categories.  
The following are qualified for Research Incentives:

1. Conference Presentation Subsidy
2. Journal Publication Subsidy
3. Publication Incentive for Journal articles
4. Publication Incentive for Conference Proceedings indexed in SCOPUS
5. IP Incentive (for Invention Disclosed, Filed and Granted)

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 41 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## **CHAPTER 7**

### **JOURNAL OF SCIENCES, TECHNOLOGY, AND ARTS (JSTAR)**

The Journal of Sciences, Technology, and Arts Research (JSTAR) is the official publication of National University (Philippines). JSTAR is a peer-reviewed open-access journal that is published annually by the Center for Research. The Journal aims to provide a venue for students, faculty members, non-teaching personnel (ASP), and industry practitioners to share their research works, empirical studies, and theories related to science, technology, and arts. Articles in JSTAR are published in English or Filipino. The Journal is indexed in Google Scholar with ISSN: 2467-5776 (Print Version) / 2467-625X (Online Version)

#### **A. CALL FOR PAPERS**

The Center for Research disseminates a Call for Paper (CFP) through an email blast using the NU email domain to all students, faculty members, and non-teaching personnel every January or February of each year. Attached to the email is the JSTAR research template. Subsequently, a CFP is also posted at NU's Official Website.

#### **B. REVIEW PROCESS**

The peer-review process starts after the deadline of the CFP. The Editor-in-Chief checks the papers submitted for appropriateness towards the Journal, its novelty, and timeliness. The EIC can reject the paper without being reviewed further. Articles that are accepted by the EIC are submitted to at least two (2) invited reviewers. The invited reviewers, however, may reject or accept the invitation to review, depending on their expertise and possible conflict of interest. If a reviewer agrees to check the paper, he or she is given two (2) to three (3) weeks to review the article.

Once finished, the reviewed article is sent back to the author/s for the needed revision. A deadline will be given to the author/s to modify the paper. Upon completion, the revised paper is submitted to the reviewers for final checking. Given all required revisions are met, the author/s are notified with the acceptance of the article for publication. A print copy of the publication is released every September or October of the same year.

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 42 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## CHAPTER 8 RESEARCH POLICIES

### 1. GENERAL RESEARCH POLICY

1. The policy shall apply to NU Philippines.
2. Research activities will aim at fulfilling the NU Vision, Mission, and Core Values statements; Strategic Objectives and the aspiration of the country.
3. NU will take into account the goals and priorities established by appropriate government agencies in establishing its research priorities, both in regional and national concerns.
4. The faculty members and ASP shall be free to research any area, provided that they adhere to NU's ethical principles and values.
5. NU faculty members and ASP will strive for excellence in both international, national and regional research and recognize the value of the regionally, nationally and internationally recognized research that are both directed for the benefit of the country.

Overall, NU shall invest and give equal emphasis on the resources needed and the time allocation for all types of research covered by this set of policies.

### 2. RESEARCH GRANTS

#### a. National University Research Grants

The NU research grants are also known as research seed grants and are open to full-time faculty members and regular ASP as project proponents and to part-time faculty members as co-proponents who have a strong commitment to NU and a reasonable expectation of continued employment at the NU.

These are granted or allocated as follows:

- a. To the NU faculty members and ASP on the basis of merit and are designed to kick-start new research projects. Such research should not continue to rely upon the NU research grants as its principal sources of funding. Instead, its researchers are expected to access grants from non-university sources, such as international, corporate or private grant sources.
- b. A Call for Proposal (CFP) is scheduled every academic term for projects intended to be implemented on the succeeding term/s. It is mandatory that any NU employee that will be part of any research project should attend a Research Orientation scheduled at least a month prior to the CFP to ensure that those who will be involved with research projects are aware of the

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 43 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

processes of preparing a proposal to include Line Item Budget (LIB), Work Plan (WP), and all other deliverables. The Certificate of Attendance (COA) must be an attachment to the IFRP Form.

- c. The research project duration, which will be shown in the workplan, can be from one (1) academic term (short-term projects) up to three years for multiple phased (long-term) projects. Deliverables for long-term projects are determined per term.
- d. The NU research grants include funding allocation value of Php 50,000 per project, though more complex projects may have higher allocation on a case-to-case basis approval. Funding allocations may also be set aside for special research projects that may be identified by the Vice-President for Research and Development.
- e. Teaching/working hours load of nine (9) units teaching load per research project. However, an 18-unit load may be given to more complex studies such as quasi-experimental and true experimental research and EFRP projects. On the other hand, ASP can apply for a once a month research leave (can be in or out of campus) for the whole duration of the project. All research-related official leave (OB) of any employee must follow the OB Application Process.
- f. These grants are mainly for the support of primary data collection, as in survey and interview; travel expenses, photocopy of manuscript or journals, purchase of books, and other research consumables, experimental material supplies, remuneration for research assistants (if needed), specialized software, hardware maintenance, rentals and others.
- g. Publications resulting from research supported by the NU Research grants must acknowledge the support of the NU and include this support in the author's address.
- h. Projects that qualifies for Patents and Utility Model must secure first an IP Application prior to public disclosure.

The funding for research is P75,000.00 per researcher per year. This amount constitutes the following: actual research funding (up to P50,000.00), load, research seminars, research incentives and publication funding.

## **b. External Research Grants**

NU actively encourages faculty researchers to access external research grants, whether from official government sources, commercial/corporate funding, research trusts from other academic institutions in the form of individual or from joint institutional research projects. Such external grants reflect external recognition of research competence and enhance both the researcher's reputation and the NU's research standing.

Date of Effectivity	4 April 2022	Control Mark	Page 44 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

To enhance the chances of securing such grants, the NU researchers are encouraged to establish or join regional, national and international research networks, and to collaborate with their local and international counterparts.

NU shall charge overhead at the following rates:

Percentage distribution of rates will be as follows:

- 10 % - for grants from governments and international organizations;
- 10 % - for research contracts from industrial or business partners if the results are to be published in an open forum;
- 5 % - for contracts from industrial or business partners if the results cannot be published in an open forum because they are considered proprietary and fully owned by the sponsor;
- Negotiable, if the sponsor has pre-existing policy of lower overhead rates.

### c. Limit on Number of Research Grants or Projects

To ensure that researches are completed on schedule, the Center limits the leadership and membership of researchers in research work as follows:

- All full-time faculty member researchers are limited to leading a maximum of two research grants or projects at any one time and to participating in a maximum of two further projects as members of a research team.
- Holders of professorial chairs in the college undertaking cluster research may participate in as many research grants and projects as they can manage to do and as may be allowed them by their full-time dedication to high quality research work. Such levels of participation must however, not jeopardize the expected high quality of output of the college.

## 3. RESEARCH OUTPUTS

National University recognizes the following as concrete evidence of quality research output:

- Externally-refereed publications like articles or scientific papers in national and international journals of scholarly repute, or in refereed open-access web-based academic journals;
- Monographs, books, chapters in books and published conference proceedings;
- Research work presented in external international and national conferences, seminars and workshops;
- In-house research working papers, technical reports, professional society publications;
- Publication in University Academic Journal(s);

Date of Effectivity	4 April 2022	Control Mark	Page 45 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

6. research-based creative works, exhibitions, and artistic performances;
7. Research output able to succeed in attracting external research funding;
8. Invention Disclosures with subsequent filing;
9. Proof of community or industry adaptor/s; and
10. Supervision of research graduate students in the completion of their degrees.

#### 4. CONTRACTUAL OBLIGATIONS OF RESEARCHERS AND NATIONAL UNIVERSITY

1. Researchers are obliged to complete all assigned and agreed upon research and to publish findings of such research as widely as possible or to submit Invention Disclosures. From a research supported by funds from NU, the researcher recipients are expected to return the funding to NU by way of an output from the research conducted. NU, for its part, is obliged to support and assist researchers in meeting all their research obligations.
2. Publication of research should be current and of high quality. Ideally, there should be a minimum amount of delay between the end of any research and the submission for publication of its findings. However, any delay in submission for publication of research findings should not normally exceed a period of 12 months.
3. Invention Disclosures must be submitted at least one (1) month from project completion, while IP filing must be done within a period of 12 months.
4. Failure of researchers to complete their research would mean payment of the total amount released unliquidated research grant through salary deduction or an equivalent units overload on succeeding terms, provided that a written letter, endorsed by the Dean or Director, and approved by the Director of the Human Resource, stipulating the academic term/s that the said payment be made by way of overload teaching.

Date of Effectivity	4 April 2022	Control Mark	Page 46 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## CHAPTER 9 INTELLECTUAL PROPERTY POLICY

### A. PURPOSE

The University recognizes the necessity to provide policies with the following goals:

1. To create an environment that encourages the generation of Intellectual Property by NU Philippines;
2. To motivate the development and the wide dissemination of the products of research, authorship and inventions by the University community by providing appropriate financial rewards, recognition and administrative assistance to creators of intellectual property.

### B. COVERAGE OF POLICY PROVISION

This policy applies to intellectual property created by members of the NU Philippines and other persons who make substantial use of University resources. Furthermore, the policy encompasses all forms of intellectual property as indicated in the Intellectual Property Code of the Philippines (RA 8293).

### C. DEFINITION OF TERMS

1. **Commissioned Work** - Work commissioned or ordered in writing by the University from a Member of the University.
2. **Copyrightable Work** - Any literary or artistic work, whether original or derivative, which has been done in any tangible form of expression, as enumerated in Sec. 172 and Sec. 172 of the Intellectual Property Code of the Philippines.
3. **Creator** - Any Member of the University whose creative activity results in an item of intellectual property.
4. **Externally Sponsored Work** - Work conducted under an agreement between an external sponsor and the University.
5. **Faculty** - Any person hired to render teaching services, whether on full-time in which case he/she is expected to render forty hours of service per week, or on part-time in which case his/her hours of service are dependent on the exigencies and needs of the University.
6. **Intellectual property** - Any property defined as such by the Intellectual Property Code of the Philippines (RA 8293), consisting of: copyright and related rights; trademark and service marks; geographic indications; industrial designs; patents; layout designs (typographies) of integrated circuits, and; protection of undisclosed information.

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 47 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

7. Internally Sponsored Work - Work conducted by a Member of the University or which entailed substantial use of University facilities.
8. Invention - A novel creation, discovery, idea or device that may be patented under the law.
9. Member of the University - Any full-time or part-time faculty, staff or student as a person engaged in a creative activity, making substantial use of University resources.
10. Net Revenue - Gross income received from the commercialization of the Intellectual Property less expenses incurred by the University in connection with the administration, protection and commercialization of the Intellectual Property.
11. Patent - A statutory monopoly, which protects the owner against unlicensed use of the patented product or process or any improvement thereof.
12. Patentable Invention - Any technical solution of a problem in any field of human activity, which is new, involves an inventive step and is industrially applicable.
13. Scholarly or Pedagogical Works - Copyrightable Works created for traditional academic purposes. Examples include scholarly books (including textbooks), instructional materials including lecture notes, classroom presentations, research articles, research monographs, student theses and dissertations, novels poems, films, videos, musical compositions and performances, dramatic works and performances and visual works of art.
14. Staff - Any employee of the University, other than faculty, whether full-time or on part-time contractual status.
15. Student - Any full-time or part-time graduate student enrolled in any College of the University.
16. Substantial Use of University Facilities - Extensive unreimbursed use of major University laboratory, studio or computational facilities, or human resources.
17. Trade mark and Service mark - Any visible sign capable of distinguishing the goods (trade mark) or services (service mark) of an enterprise.
18. University Resources - Resources available to a member of the University or a person affiliated with the University.
19. Start-up - is any person or entity registered in the Philippines which aims to develop an innovative product, process, or business model as per RA 11337, The Innovative Startup Act
  - a. A person refers to a natural person who is Filipino citizen or foreign national.
  - b. An entity refers to a juridical person registered in the Philippines, including but not limited to, sole proprietor, company, partnership, joint venture, cooperative, or association.

#### **D. DISCLOSURE REQUISITES**

1. The creator of any intellectual property that is or might be owned by the University under this policy shall make prompt written disclosure of his/her work to the Director of the Center, and to execute any document deemed necessary to enable the University to file patent applications and applications for copyright negotiation when appropriate.

Date of Effectivity	4 April 2022	Control Mark	Page 48 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

- Disclosure shall be made prior to submission of the Intellectual Property for publication, other release to the public domain, or attempt to license distribute or manufacture the Intellectual Property commercially.

## **E. ADMINISTRATION OF THIS POLICY**

Authority and responsibility for this policy shall reside with the CentIE, to include administration of the policy to an individual or office.

## **F. OWNERSHIP OF TRADE MARK**

All trade marks, emblems, logos, and other marks in the goods and services that the University offers are owned by the National University.

## **G. OWNERSHIP OF COPYRIGHT**

- Owned by the Author**  
The copyright of authors' works, which are not funded by the National University is owned by the authors.
- Owned by the National University**  
The National University shall own the rights to copyright (1) when the work is funded by the University partially or fully, (2) when the work is commissioned by the University, (3) when the work author receives any form of remuneration or allowance in completing the work, and (4) when the author expressly transferred the rights to the University, in which case he/she shall execute a deed of assignment.
- Externally-funded Work**  
When the work is part of an externally funded project (i.e., not funded by the University), the ownership of copyright shall be according to the terms stipulated in the agreement between the author and the third party.
- Work of Students and Employees**  
The copyright of students' works which are not funded by National University and are part of their course work is owned by the students. If the students' work was created when he/she was the recipient of financial support from the University, such as tuition waiver, scholarship, stipend or allowance, the Intellectual Property shall be owned by the University except for thesis/ dissertation. In cases of collaboration between students and faculty members, the two parties shall have an agreement as regards task assignment, intellectual property rights and royalty prior to the commencement of work.

Date of Effectivity	4 April 2022	Control Mark	Page 49 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

#### 5. Work of Employees

Copyrightable Work, other than scholarly or pedagogical work, and inventions created by an employee of the University within the scope of his/her employment shall be owned by the University. Examples of Copyrightable Work subject to this provision include personnel manuals, written policies, administration handbook, public relations materials, audio and video recordings of University events and University Web pages.

### H. OWNERSHIP OF PATENT

#### 1. Owned by the Author

The patent of authors' works is owned by the authors except in conditions listed in item 2 below.

#### 2. Owned by the National University

National University shall own the rights to patent in the following conditions: (1) when the invention is produced as part of the inventor's regular duties, (2) when the invention is funded by the University partially or fully, (3) when the invention is produced making a substantial use of the University's resources, (4) when the invention is commissioned by the University, (5) when the inventor receives any form of remuneration or allowance in completing the work, (6) when the inventor expressly transferred the rights to the University, in which case he/she shall execute a deed of assignment.

#### 3. Externally-funded Work

When the invention is part of an externally funded project (i.e., not funded by the University), the patent rights shall be according to the terms stipulated in the agreement between the author and the third party.

#### 4. Work of Students and Employees

The patent rights of students' invention which are not funded by National University and are part of their course work is owned by the students. If the students' invention was created when he/she was the recipient of financial support from the University, such as tuition waiver, scholarship, stipend or allowance, the Intellectual Property shall be owned by the University except for thesis/ dissertation. In cases of collaboration between students and faculty members, the two parties shall have an agreement as regards task assignment, intellectual property rights and royalty prior to the commencement of work.

#### 5. Work of Employees

Patentable work and inventions created by an employee of the University within the scope of his/her employment shall be owned by the University.

### I. DISTRIBUTION OF INCOME FROM INTELLECTUAL PROPERTY

Subject to the terms of any sponsored work, net revenue obtained from commercialization of University-owned Intellectual Property shall be distributed as follows:

Date of Effectivity	4 April 2022	Control Mark	Page 50 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

1. 50% to the Creator(s)
2. 50% to the University

However, when commercialization funding are for external source, the parties must agree on a case-to-case basis profit-sharing scheme.

The University's share may be distributed, as deemed appropriate by the President, among the units of the University responsible for the creation and commercialization of the Intellectual Property

## **J. RESOLUTION OF DISPUTES**

Any questions of interpretation of claims arising out of or relating to this policy, or disputes as to ownership rights of Intellectual Property under this policy, shall be settled by the following procedure:

1. The issue must first be submitted, in the form of a letter, setting forth the grievance or issue to be resolved, to the VPRnD who may convene a Panel to study the matter. The Panel shall submit its recommendation to the Vice President, who shall decide on the matter within 60 days from the submission of the letter.
2. The decision of the Vice President may be appealed to the President, whose decision shall be final.

## **K. PENALTIES**

Any person who violates any of the policies stated herein shall be subjected to disciplinary action in accordance with the provisions in this Research Manual, Employee Manual, Faculty manual, or other school policies on employment.

## **L. AMENDMENTS**

Amendments to this policy may be proposed by any Member of the University and shall be approved by the Board of Directors, upon the recommendation of the President.

## **M. WAIVING OF INTELLECTUAL PROPERTY POLICY**

The President of the University may waive or modify any or all provisions of these policies on meritorious cases. This waiving of IP policy may be executed by the President on his own initiative or in consultation with the University Research Ethics Committee.

## **N. REPEALING CLAUSE**

All University policies inconsistent with the policies contained herein are all repealed.

Date of Effectivity	4 April 2022	Control Mark	Page 51 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 52 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## CHAPTER 10 AUTHORSHIP POLICY

### A. PURPOSE

The purpose of this policy is to guide authors on sequencing and listing authors in a collaborative project. In this way, authorship disputes will be minimized if not eradicated.

### B. COVERAGE OF POLICY PROVISION

This policy applies to all authors affiliated to NU Philippines and is implemented through National University Center for Research. Moreover, this policy should be reviewed periodically to adapt to the changes in scholarly publications.

### C. DEFINITION OF TERMS

1. Authorship – It refers to an explicit assigning of responsibility and attributing credit for intellectual work.
2. Planning and Management – It refers to the preparatory stage before conducting the actual research project. This covers but is not limited to preparation of timeline, budget, and instruments.
3. Executing – It refers to the actual implementation of the research project.
4. Analyzing – It refers to the analysis of data using quantitative and qualitative method.
5. Interpreting – It refers to the explanation of results after analysis.
6. Writing – It refers to the actual writing of the final paper for publication.

### D. GUIDELINES

1. Before the start of the research project, all authors should write a letter of understanding specifying the responsibilities of all parties. A Term of Reference (TOR) must be attached.
2. All authors should be involved in the preparation of the manuscript (e.g., drafting, reviewing, approving).
3. Upon completion of a research project, authors are encouraged to use the following table in identifying the extent of contribution and order of authorship which should be decided by all authors.

Research activities	Contribution	Points
Planning & Management	No	0
	Minor	5

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 53 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

Executing	Moderate	10
	Major	20
	No	0
	Minor	5
	Moderate	10
Analyzing	Major	20
	No	0
	Minor	5
	Moderate	10
	Major	20
Interpreting	No	0
	Minor	5
	Moderate	10
	Major	20
	No	0
Writing	Minor	5
	Moderate	10
	Major	20
	No	0
	Minor	5
<b>Total</b>		<b>100</b>

- Anyone achieving a total of 25 points in this co-authorship scoring system share authorship, and the order is decided according to the total scores obtained.
- In case of authorship disputes, it is highly suggested that these be settled at the level of authors.

## E. PUBLICATION AND DISSEMINATION OF RESEARCH

- Researchers are expected to publish their work guided by university research ethics guidelines and other relevant guidelines.
- NU works to make research sponsors understand that the researchers must have academic freedom. Every effort must be made to inform sponsors in advance of any potential publication or dissemination of research findings. This will give sponsors adequate time and accurate information to protect any arising IP or to plan their own public relations together with NU, especially since media publicity is increasingly important to industry, civil society organizations, and NU itself.
- Researchers should adhere to the following guidelines when publishing or disseminating their research findings:
  - Researchers should make every effort to ensure that their research or research findings are peer reviewed before they are published, publicized or disseminated. If research is placed in the public realm before any peer review has been undertaken, this must be made clear by the researchers; and

Date of Effectivity	4 April 2022	Control Mark	Page 54 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

- b. Researchers should properly and expressly acknowledge co-authors or collaborators as well as the sources of funding in any publications.

## **F. ANNUAL RESEARCH REPORT**

Principal researchers of every research project are responsible for generating an annual research report which is submitted to the CentRES for approval. The Center for Research which acts as secretariat to the NU Research and Development Council is responsible for collating all such approved reports into a University Annual Research Report for circulation to the entire NU Philippines. Such a report informs the public about research in NU and encourages the pursuit of research excellence. Publication of detailed annual research income and expenditure also allows for transparency and accountability of all research funds.

## **G. RESEARCH RECOGNITION**

NU shall recognize research excellence through academic promotion and annual research recognition for the following categories: publications in ISI or Scopus-indexed journals, completion of internally funded projects, citations, IP filed and granted, and special awards. NU is also committed to sponsoring and nominating research projects and researchers for external recognition.

Date of Effectivity	4 April 2022	Control Mark	Page 55 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## **CHAPTER 11**

### **GENERAL ETHICAL GUIDELINES FOR NATIONAL UNIVERSITY RESEARCH**

#### **A. UNIVERSITY ETHICS REVIEW COMMITTEE (UERC)**

The UERC is composed of the CentRES Director as chair, members of the URDC who are not part of the college of the member involved in the investigation, tenured full-time faculty researcher from the college of the member involved in the investigation was not a part of, and an external panel. The committee reviews and approves the ethical aspect of researches involving human and/or animal subjects in accordance with the General Ethical Guidelines for University Research.

#### **B. POLICY ON ETHICS**

##### **a. Humans and human communities as research subjects**

- a. The interests and rights of those involved or affected by the research must be appropriately safeguarded. The principle of voluntary participation and withdrawal of participation at any time by the participants must be respected.
- b. The researchers must ensure that the legislative requirements on human rights and confidentiality or anonymity of participants have been met. Clearly, anonymity is a stronger guarantee of privacy, but if the researchers must know the names of participants, this or any information that could serve to identify the participants cannot be released to the public. The researchers must explain in writing how the participants' right to privacy will be safeguarded.
- c. The researchers must secure informed consent before the work begins and must not expose the participants to risk of harm as a consequence of that participation. Harm includes both physical and psychological offenses against the sensibilities of the participants. Researchers must also ensure that the research participants must be informed about the procedures and possible risks before they sign the consent form. Signed consent forms must be presented on demand. In the case of children, the parent or guardian can give the informed consent.
- d. The researchers must maintain integrity and develop the highest possible standards of research practices including research design, data collection, storage, analysis, interpretation and reporting. Reporting may include providing the information back to the community from which the information was gathered depending on the sensitivity of the research.
- e. The researchers must be aware of the potential consequences of the research to various stakeholders.

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 56 of 60
Supersedes	None		





<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

- f. The researchers must submit their proposal to the Research Ethics Sub-Committee and other appropriate external professional ethical committees for approval when the situation calls for it. Any significant change to the procedures after the proposal is approved must be submitted to the Research Ethics Sub-Committee for re-approval.
- g. The Research Ethics Sub-Committee shall consist of three members: the Director of the Center for Research and two others who shall be appointed by the URDC.

b. Integrity

- a. Researchers should observe research integrity at all times whatever type of research activity they are engaged in (e.g., data gathering and analysis, application for funding and grants, publication).
- b. Researchers should acknowledge and/or include colleagues who have directly and indirectly contributed to the work.
- c. All researchers should actively practice the following:
  - i. Emphasizing high quality research;
  - ii. undertaking appropriate research supervision;
  - iii. maintaining accurate and detailed research activity records and results;
  - iv. being ethical about the objectives of one's research;
  - v. being open to and cooperative with one's fellow researchers and others;
  - vi. being committed in publishing and further developing or commercializing one's research findings.
- d. Researchers are accountable to society, their respective professions, communities and universities where the research is taking place, the staff and students involved, and to sponsors funding the research.
- e. At the beginning of a research project, researchers are required to declare in writing and manage potential conflicts of interest. At the end of a research project, researchers are required to disclose any real financial or professional conflict of interest in writing. Areas of real or potential conflict of interests include the following:
  - i. researchers having an existing or potential financial interest in the outcome of the research;
  - ii. researchers likely gaining any private benefit that is dependent on the research outcome; and
  - iii. researcher's professional or personal gain arising from the research outcome may be more than usual or normal in a specific research undertaking.

Date of Effectivity	4 April 2022	Control Mark	Page 57 of 60
Supersedes	None		

<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

### C. RESEARCH MISCONDUCT

The following violate commonly accepted principles and practices of research upheld by the general academic community. Such are serious offenses that NU considers as research misconduct that call for strict disciplinary action.

1. **Fabrication of data:** Dishonesty in reporting results ranging from fabrication of data, improper adjustment of results, and gross negligence in collecting or analyzing data, to selective reporting or omission of data for deceptive purposes;
2. **Falsification of research:** Deliberately misrepresenting research, including the progress of research, making grossly exaggerated claims of the significance of research results, falsely claiming priority by willfully ignoring prior relevant reports in research literature;
3. **Plagiarism:** Taking credit for someone else's work and ideas, stealing other's results or methods, omitting acknowledgment of significant contributions received from others, copying the writing of others without proper acknowledgment, or falsely taking credit for the work and ideas of others;
4. **Failure to acknowledge:** Willfully ignoring and failing to acknowledge the source of materials used in laboratory research or significant human assistance.
5. **Abuse of confidentiality:** Taking or releasing ideas and data that were shared with the legitimate expectation of confidentiality (e.g. use of confidential results without permission of other researchers or previous employers), stealing ideas from others' grant proposals, award applications, or manuscript publication;
6. **Dishonesty in publication:** Knowingly publishing material that will mislead readers (e. g. misrepresenting data, particularly its originality, misrepresenting research progress, adding the names of other authors without their permission, or including honorary authorships or excluding a major collaborator as co-author of the paper);
7. **Misuse of funds:** Failure to spend research funds in ways consistent with the goals stated in the relevant contract documents and/or failure to maintain clear and proper records of expenditures;
8. **Mistreatment of human research subjects:** Individuals and communities have the right to know the results of research in which they have been involved as subjects even if they do not exercise that right: Researchers must supply a form of report to individuals or the community that was the subject of research. Researchers then mistreat their research subjects if they fail to obtain from them their informed consent and to protect their rights as informants regarding their privacy, anonymity, and confidentiality of information sources.

Date of Effectivity	4 April 2022	Control Mark	Page 58 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

9. **Failure to report known incidents of serious research misconduct:** Covering up or otherwise failing to report major offenses of research known to oneself; and/or
10. **Retaliation against informants:** Taking punitive action against an individual for having reported alleged major research offenses.
11. **Supervision:** For a group research project, leaders are responsible for the supervision of the whole research process, including the designing of the research project; preparing funding applications, the design of experimental or research protocols; analyzing and recording of data; and the publishing and disseminating of results. The project leader is also responsible for the appointment of suitably qualified research assistants and for the supervision of the research assistants in the course of the research.

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 59 of 60
Supersedes	None		



<b>Title:</b>  <b>RESEARCH MANUAL</b>	<b>Reference No.</b>	RAD – RS – D – M – 001
	<b>DEPARTMENT</b>	OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT
	<b>Copies To</b>	All Concerned Units
<b>This is a controlled document.</b> Photocopying or printing of this document, without the controlled mark, shall make this document an uncontrolled copy.		

## **CHAPTER 12 ONLINE PROCESSING**

The OVPRnD advocates online submission and approval of documents to facilitate timely processing of proposals and requests. The following additional guidelines will be adopted when physical or manual processing is eventually removed:

1. The same guidelines for IFRPP processing will be observed but done electronically through the attachments of eSignatures. In extreme circumstances when this becomes impossible, email threads are acceptable.
2. Funds requests must be coursed through the lead proponent.
3. All necessary reporting and documentation must be complied with and may be done electronically.

Date of Effectivity	4 April 2022	<i>Control Mark</i>	Page 60 of 60
Supersedes	None		