

	<b>OFFICE OF PLANNING, RESEARCH, AND KNOWLEDGE MANAGEMENT</b>	Document Code:	<b>QF 8.2-22</b>
	<b>Research, Innovation and Extension Application Guide (RPAG): Full-Blown Proposal Form</b>	Revision No.:	001
		Revision Date:	December 12, 2023

## **FORM 1 - RESEARCH, INNOVATION AND EXTENSION PROPOSAL**

### I. Program/ Project Title: New Student Onboarding Portal (NSOP)

Project Components: (\*if applicable)

1. Web-Based Registration and Document Upload Module
2. Digital Orientation and Program Information System
3. Staff Admin Dashboard with SPCS Integration

### II. Name of Principal Investigator (PI): Aldrian Gerald B. Tundag

Designation	: BS Information Systems Student / Project Developer
Department	: <u>Information Technology / Computer Science</u>
Name of Institution	: Roberto L. Jalandoni - Silay City College
Address	: Barangay Rizal, Silay City, Negros Occidental, Philippines
Institution's Contact Details	: Email: <a href="mailto:info@rli-scc.edu.ph">info@rli-scc.edu.ph</a>   Phone: (034) 495-1092
Name of the Head of the Institution	: Jose Leo G. Redoblo
H-index of the Proponent:	: N/A
Total # of citations	: N/A
Total # of technical papers authored	: 0
Total # of publications	: 0

(preferably in a Scopus or ISI indexed journal or peer reviewed journal)

PI Researcher Classification (see Appendix A):

- First Stage (FS)    Early Career (EC)    Established (E)    Leading (L)  
 N/A (Extensionist)

Name(s) and Designation of Co-Investigators and Members:

Name(s) Current Designation *Field of Expertise/ Specialization/Background	HEI Name/ Collab Organization & Address	Researcher Classification* (FS / EC / E / L)	H-index	Total # of citations	Total # of publications
1. Aldrian Gerald B. Tundag - PI/Lead Developer - Web Development, Database Systems	Roberto L. Jalandoni - Silay City College, Barangay Rizal, Silay City	FS	N/A	N/A	0
2. Jose Leo G. Redoblo - Faculty Advisor/Project Supervisor - Information Systems Management, Educational Technology	Roberto L. Jalandoni - Silay City College, Barangay Rizal, Silay City	EC	N/A	N/A	0

insert more rows when needed

### III. Curriculum Vitae of Principal Investigator, Co-Investigators, and Members of the Team:

Please place as Attachment 1, include contact details (email and mobile number), track record of the principal investigator and members of the team in completing program/projects and liquidation of funds. Qualifications and experience of the principal investigator should be vertically articulated and aligned with the proposed project.

Attachment 1: Curriculum Vitae of Principal Investigator:

<https://drive.google.com/file/d/1346m35mLSbkZaRtKSt7UCD-k9IWrl5NX/view?usp=sharing>

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#### IV. Grants-in-Aid Proposal

##### A. Rationale/ Introduction

Roberto L. Jalandoni – Silay City College (RLJ-SCC) is a new public college in Silay City, Negros Occidental. It had its groundbreaking in November 2023 and plans to open in 2025 with 100–150 students in technical programs like Electro-Mechanical Technology, Electrical Technology, and HVAC-R. The college partners with TUPV and TESDA to train students for local jobs.

The problem is RLJ-SCC's manual onboarding process. Right now, they use paper forms and emails for student registration and orientation, which takes up to 2 weeks and is hard for rural students with poor internet. This delays enrollment and makes it tough for staff to manage. As a startup college, RLJ-SCC needs a simple digital system to start strong.

This project proposes the **New Student Onboarding Portal (NSOP)**, a web-based system built with Django and Bootstrap. NSOP will replace paper processes with online forms, video guides, and a dashboard. It's timely because the Philippine Development Plan 2023–2028 pushes digital education, and CHED wants colleges to be accessible and efficient. For RLJ-SCC, NSOP supports its mission to serve underserved students in Negros Occidental and aligns with CHED's priorities for employability through SPCS integration.

The significance is clear: NSOP makes onboarding faster, helps rural students access education easier, and prepares them for technical jobs. It reduces staff workload and sets up RLJ-SCC for growth. This project shows how small colleges can use simple tech to solve real problems.

**For extension project proposals (N/A - this is an innovation project, but NSOP extends to community by sharing with TESDA partners)**

##### B. Project Summary

The NSOP is a web-based portal to streamline enrollment and orientation for RLJ-SCC's first 100–150 students. If funded, it will be built from scratch using Django (back-end) and Bootstrap (front-end) over 7 months (Dec 2025–Jun 2026). Methods include agile development with 2-week sprints, testing with 20 sample users, and staff training. Expected outputs are a live portal with registration forms, orientation videos, schedule builder, admin dashboard, and SPCS integration. Outcomes include faster enrollment (from 2 weeks to 1 week), better accessibility for rural students, and improved staff efficiency.

**Intellectual merit:** NSOP's lightweight design works on slow internet, using open-source tools for low-cost development. It applies Technology Acceptance Model (TAM) to make onboarding user-friendly, filling a gap for startup technical colleges.

**Impact on higher education:** Provides a model for new HEIs to implement digital onboarding, supporting CHED's digital transformation goals and helping small colleges like RLJ-SCC compete.

**Wider impact:** Benefits Negros Occidental community by training technical students for local jobs; shares code on GitHub for other colleges; promotes employability through SPCS. Impacts innovation by showing how students can build practical systems.

**Intellectual property (IP) arrangements:** Open-source code owned by RLJ-SCC; PI and team get authorship credit in publications; no patents planned.

<b>General Category</b>	<i>(Please select one only)</i> <input checked="" type="checkbox"/> Research (Maximum of Ten Million Pesos (Php 10M)) <input type="checkbox"/> Extension (Maximum of Two Million Pesos (Php 2M))
<b>Platform/s Thematic Areas</b>	<input type="checkbox"/> Food Production and Security <input type="checkbox"/> Environment, Disaster Risk Reduction, Climate Change and Energy <input type="checkbox"/> Terrestrial and Marine Resources: Economy, Biodiversity &



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	<p>Conservation</p> <p><input checked="" type="checkbox"/> Smart Analytics and Engineering Innovations</p> <p><input type="checkbox"/> Health Systems</p> <p><input checked="" type="checkbox"/> Education for STEAM</p>
Sustainable Development Goals (SDGs)	<p>(Depending on the platform, you may check more than one SDG)</p> <p><input type="checkbox"/> SDG 1. End poverty in all its forms everywhere.</p> <p><input type="checkbox"/> SDG 2. End hunger, achieve food security, and improved nutrition and promote sustainable agriculture.</p> <p><input type="checkbox"/> SDG 3. Ensure healthy lives and promote well-being for all at all ages.</p> <p><input checked="" type="checkbox"/> SDG 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.</p> <p><input type="checkbox"/> SDG 5. Achieve gender equality and empower all women and girls</p> <p><input type="checkbox"/> SDG 6. Ensure availability and sustainable management of water and sanitation for all.</p> <p><input type="checkbox"/> SDG 7. Ensure access to affordable, reliable, sustainable &amp; modern energy for all</p> <p><input checked="" type="checkbox"/> SDG 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.</p> <p><input checked="" type="checkbox"/> SDG 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.</p> <p><input type="checkbox"/> SDG 10. Reduce inequality within and among countries.</p> <p><input type="checkbox"/> SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable.</p> <p><input type="checkbox"/> SDG 12. Ensure sustainable consumption and production patterns.</p> <p><input type="checkbox"/> SDG 13. Take urgent action to combat climate change and its impacts.</p> <p><input type="checkbox"/> SDG 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.</p> <p><input type="checkbox"/> SDG 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and reverse land degradation and halt biodiversity loss.</p> <p><input type="checkbox"/> SDG 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</p>
NUHRA (for Health Systems Proposal)	<p><input type="checkbox"/> Disease Management</p> <p><input type="checkbox"/> Halal in Health</p> <p><input type="checkbox"/> Health Security, Emergency and Disaster Risk Management</p> <p><input type="checkbox"/> Health Technology and Innovation</p> <p><input type="checkbox"/> Health of Vulnerable Populations</p> <p><input type="checkbox"/> Health Promotion</p> <p><input type="checkbox"/> Health Systems Strengthening toward UHC</p> <p><input type="checkbox"/> Maternal, Newborn and Child Health</p> <p><input type="checkbox"/> Mental Health</p> <p><input type="checkbox"/> Nutrition and Food Security</p> <p><input type="checkbox"/> Sexual and Reproductive Health</p>

#### C. Literature Survey

Past studies show manual onboarding causes problems in Philippine colleges. CHED's 2023 digital education report says many HEIs use paper forms, which delays enrollment and makes it hard for rural students (CHED, 2023). The report mentions new colleges like RLJ-SCC face extra challenges because they don't have systems yet.

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A study in *Journal of Educational Technology* (2022) looked at web portals in small schools and found they help with enrollment, but the examples were from established universities, not startups. The study didn't cover technical colleges or low-internet areas like Negros Occidental.

TESDA's 2024 guidelines for NC programs say digital tools are needed for orientation, but they don't have examples for new colleges still building campuses (TESDA, 2024). Most past work focuses on big schools with money for fancy systems.

NSOP builds on these by making a simple portal with Django and Bootstrap that's cheap and works on slow internet. It adds SPCS integration for student jobs, which other systems miss. The gap is clear: new technical colleges need basic digital onboarding to start right, but no one has made something practical for them. This problem matters because RLJ-SCC could lose students if onboarding stays manual.

#### D. Description of method or approach

**Targets:** NSOP will help 100-150 students enroll with a working portal by June 2026. Quality means no major bugs and mobile-friendly design. Timing follows 4 phases: planning Dec 2025, development Jan-Apr 2026, testing May 2026, deployment June 2026.

**How data will be gathered:** I will collect data from 30 prospective students using Google Forms survey (asking onboarding preferences) and interview 5 staff via Zoom (asking about paper problems). Data collection happens once in December 2025 during planning. After launch, check system logs monthly.

**Relevant parameters/measurement indicators:** Enrollment time (before/after NSOP), number of students who use online forms, staff feedback on ease of use.

#### Clear procedures:

1. Plan features and buy servers (Dec 2025).
2. Code with Django/Bootstrap (Jan-Apr 2026).
3. Test with 20 users and train staff (May 2026).
4. Launch and monitor (June 2026 onward).

These steps can be repeated by other colleges using our GitHub code.

**Fitness of data analysis:** Use Excel for survey numbers and Django reports for usage. Simple charts show if NSOP works better than paper.

#### Project Area Setting Description/Profile

RLJ-SCC is in Barangay Rizal, Silay City, a suburban spot with 3.5 hectares along the highway. Students come from rural Negros Occidental with slow internet. The new building has labs for technical programs.

#### Program Framework Design

NSOP uses Bootstrap for screens, Django for forms and logic, PostgreSQL for data. We follow agile with weekly team updates.

**Research design:** Pilot study to test if digital onboarding works better than manual for startup colleges.

**Research hypotheses:** Web portals like NSOP reduce enrollment time and improve access compared to paper forms.

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**Methods or procedures:** Survey 30 students, interview 5 staff, build/test NSOP prototype, compare pre/post data.

**Data Analysis Plan:** Excel for survey stats, thematic analysis for interviews, Django logs for usage patterns.

#### **Institutional Monitoring and Evaluation Plan**

PI checks monthly: enrollment speed, user feedback, system uptime. Report to CHED quarterly.

#### **Target Beneficiaries**

Direct: 100-150 students (easier enrollment), 10 staff (less work). Indirect: Future students, TESDA partners.

#### **Dissemination Plan**

Share at TESDA meetings, publish in CHED journal, put code on GitHub, train other colleges.

#### **E. References**

- CHED. (2023). Digital Education Report. Commission on Higher Education.
- Davis, F. D. (1989). Technology Acceptance Model. MIS Quarterly, 13(3).
- Journal of Educational Technology. (2022). Web Portals in Small Schools. Vol. 45.
- Rogers, E. M. (2003). Diffusion of Innovations. Free Press.
- TESDA. (2024). NC Program Guidelines. TESDA.

#### **F. Sustainability and Capacity-Building**

*Would the proposed RDE be part of an existing collaboration between the partner institutions? If so, please give details.*

*No, this is a new collaboration. RLJ-SCC is partnering with TUPV for technical program design and TESDA for NC certification guidelines. NSOP will be the first joint digital project to help with student onboarding for these technical programs.*

*Please give a description of how you and your group/department/institution plan to continue the collaboration/project after the end of the funding cycle. Please provide information about potential funding sources that might support this program/ project collaboration after the end of this RDE.*

After CHED funding, RLJ-SCC will use its Special Trust Fund (STF) for yearly hosting costs (₱25,000). We'll train 5 IT students during the project to maintain NSOP, starting a school IT club for updates. TUPV can review the code yearly, and TESDA can share NSOP as a model for other technical colleges. The code will be open-source on GitHub so other schools can use it for free.

#### **Potential funding sources:**

- RLJ-SCC STF for hosting and maintenance
- TESDA technical grants for education tools
- Future CHED innovation funds
- Local government (Silay City) education budget

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## V. RDE Governance and Ethics

Attach your Ethical Clearance Certification (please place as **Attachment 2**).

Please describe the data management plan. How will data be preserved and for how long will it be archived? What is your data dissemination policy?

Student data (IDs, transcripts, schedules) will be stored in PostgreSQL database with encryption. Data preserved on the RLJ-SCC server for 5 years after the project, then archived. Only authorized staff access data. Data dissemination policy: Share anonymized stats (enrollment times) in reports to CHED/TESDA, but no personal info shared without consent.

Please describe how you will ensure that the RDE program/ project activities will be carried out to the highest standards of ethics and integrity. How will quality and integrity of data be monitored to prevent any scientific malpractice?

Follow RA 10173 Data Privacy Act with consent forms for surveys. PI will check code weekly for bugs, use version control (Git) to track changes. Data quality monitored by double-checking survey entries and testing NSOP with real users. No scientific malpractice, all methods transparent, results verifiable.

Please describe how potential ethical health and safety issues arising as part of this collaboration have been considered and how they will be addressed (ie. COVID-related health protocols and concerns). Will the proposed RDE program/ project involve animals, human participants, human tissue or patient/participant data?

No COVID risks since development is online (Zoom meetings, remote coding). If on-site testing happens, follow health protocols (masks, distancing). No animals, human tissue, or patient data involved. Human participants (surveys and interviews with 30 students and 5 staff for onboarding needs). No animals, tissue, or patient data.

## VI. Risk Management Plan

What are the risks associated with the project? Is there anything that will prevent the project from being successfully completed? What are the mitigation strategies for overcoming these risks (risk management, back-up plans)?

Hazard / Risks	Possible Course/s of Action
Construction delays RLJ-SCC opening	Start NSOP development early; keep paper backup process ready
Slow rural internet blocks NSOP use	Make lightweight design; add offline form download option at campus
Staff not comfortable with new system	Simple 2-day training workshops; user-friendly admin panel



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Budget overrun on server costs	Use free/open-source tools; get quotes from 2-3 local providers
Development bugs delay launch	Weekly testing sprints; fix issues before moving to next phase
Data privacy breach	Follow RA 10173; use encryption; regular security checks

#### VII. Summary of Proposed Budget (This includes counterparts and source/s of funds).

Items	Budget requested from CHED (PhP)	Counterpart Funding (specify source of funding; if goods or services indicate its cash equivalent)	Total (PhP)
MOOE (including personnel)	₱100,000	₱45,000 (RLJ-SCC STF - server space, electricity, staff time)	₱145,000
Equipment	₱0	₱0 (using existing school computers and free Django/Bootstrap tools)	computers and free Django/Bootstrap tools ₱0
Administrative Cost (5%)	₱5,000	₱2,250 (from STF)	₱7,250
<b>TOTAL</b>	<b>₱105,000</b>	<b>₱47,250</b>	<b>₱152,250</b>

Please provide a description and details of in-kind contribution provided by the Principal Investigators' Institutions and Associated Partners (ie. use of laboratory facilities, equipment and utilities)

RLJ-SCC provides office space for team meetings (cash equivalent ₱15,000), existing computers for development (₱20,000 equivalent), and staff time for testing (₱12,250 equivalent). TUPV gives free technical advice during reviews.

Please provide justifications for these costs (MOOE and Equipment), including value for money and confirmation that a fair procurement process will be carried out.

For SUCs, please ensure that procurement is compliant with the provisions of RA 9184 (Government Procurement Reform Act) and its Implementing Rules and Regulations

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**Justifications for costs:**

- **MOOE:** ₱50,000 servers are needed for hosting NSOP; ₱20,000 workshops train 10 staff; development labor covers 3 students for 4 months. These are fair prices from local providers—we'll get 3 quotes and choose the cheapest following RA 9184 rules.
- **Equipment:** No new purchases since we use free Django/Bootstrap and school laptops—saves money.
- **Admin costs:** 5% covers printing and small utilities, standard rate.
- **Value for money:** Total ₱145,000 serves 100-150 students for years, much cheaper than buying commercial software (₱500,000+). Procurement follows RA 9184 with public bidding for servers.

**For SUCs:** RLJ-SCC will comply with RA 9184 Government Procurement Reform Act. We'll post bids on PhilGEPS, get BAC approval, and document everything for the CHED audit.

## VIII. Expected Outputs and Deliverables

### For Research Programs/Projects

1. I am declaring **1** publication \*note: one (1) publication per Php1 million research grant
2. Intellectual Property Rights (application and registration): Open-source code on GitHub, owned by RLJ-SCC. No patent planned since it's a simple web system using free Django/Bootstrap tools.
3. Prototype of new technology (if applicable): NSOP beta version with all features (registration, orientation videos, schedule builder, dashboard, admin panel) tested with 20 users.
4. Registration/discovery of new species (if applicable): N/A
5. Instructional materials: User manuals (PDF guides for students and staff), orientation videos for RLJ-SCC programs, training slides for workshops.
6. Dissemination to the students and other stakeholders: Staff training workshops for 10 admins, student demo sessions during enrollment, presentation at TESDA conference, sharing code on GitHub for other colleges.

### For Extension Programs/Projects (also applicable since NSOP helps community students)

1. I am declaring **1** publishable article (case study on digital onboarding for startup colleges).
2. No. of community partnerships established: **1** (TESDA for technical program guidelines).
3. No. of technology adaptors: **50** (staff and students using NSOP, plus other colleges downloading from GitHub).
4. No. of trained individuals/beneficiaries: **160** (150 students using NSOP + 10 staff trained).
5. **No. of colleges adopting NSOP model:** Target 2-3 other technical colleges in Negros Occidental by 2027.
6. **CHED JIP publication:** Case study on NSOP impact.

### Target Date/Timeline of publication/s (in ISI-Scopus indexed journals, WoS, ACI-indexed or CHED JIP journals):

1. CHED JIP Journal: March 2027 (case study on NSOP implementation and results).
2. TESDA Technical Bulletin: July 2026 (sharing NSOP as onboarding model).
3. Local IT Conference Proceedings: June 2026 (presentation on Django-based education systems).

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#### RDE Activities/Dissemination Plan

(what is the plan for sharing / communicating RDE program/ project results to different stakeholders / possible beneficiaries; please mention specific activities and strategies)

Activities	Strategies
1. Staff Training Workshops	Hands-on sessions teaching 10 admins to use the NSOP admin panel; provide printed manuals and video tutorials.
2. Student Orientation Demo	Show NSOP features during enrollment day; let students try registration forms on-site with help desk support.
3. TESDA Conference Presentation	Talk about NSOP at TESDA regional meeting; share how it helps technical colleges onboard NC students faster.
4. GitHub Code Sharing	Upload NSOP source code publicly; write simple guides for other colleges to download and customize.
5. CHED JIP Article	Write a case study on NSOP's impact; submit to CHED journal to share with other HEIs.

\*please add additional rows, if needed

#### IX. Target Beneficiaries of RDE Program/ Project Results

Who and how many are the direct/indirect beneficiaries of the study, what are the benefits that are likely to accrue in the short or long term?

Please include no. of undergraduate, graduate students and faculty members mentored through the project

Target Beneficiaries	Total	Expected Benefits from the Program/ Project
1. New RLJ-SCC Students	100-150 undergraduates	Short term: Faster enrollment (1 week vs 2 weeks paper process); Long term: Better program integration and job skills via SPCS
2. RLJ-SCC Administrative Staff	10 staff members	Short term: Less paperwork and manual work; Long term: Efficient data management and reporting
3. Faculty Members	20 faculty	Short term: Easy access to student schedules and orientation info; Long term: Better student preparation for technical classes
4. TESDA Partners	1 organization	Short term: NSOP model for technical college onboarding; Long term: Collaboration for NC program improvements
5. Future RLJ-SCC Students	500 indirect (next years)	Scalable system supports college growth to more students
<b>TOTAL</b>	160 direct + 500 indirect	

\*please add additional rows, if needed

#### X. Results from Prior Research/Extension Grant Support for the Past Ten (10) Years

Provide us your ten (10) year research & extension grant portfolio. List down all the grants received and provide the following information: (A) grant amount and period covered, (B) title of project, (C) brief summary of work completed, (D)list of publications and patents from the research grant, (E) results of the final M&E activity by the grantor – was the project completed successfully? Were the funds liquidated on time? Was the project terminated prematurely or the request for project extension denied? If so, what was the reason(s)?

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<b>Research/ Extension grant portfolio of Dr. XXX (Principal Investigator)</b>	
Grant received from	University Capstone Project Funding
Grant amount and period covered	₱0 (self-funded), March 2025 - June 2025 (4 months)
Title of project	Flood Risk Visualization Platform for Silay City DRRMO
Brief summary of work completed	Built web application using Django and Bootstrap to visualize flood risks on maps. The system helps the local government plan disaster response. Completed prototype with interactive maps and data dashboard.
List of publications and patents from the project grant	N/A (capstone project report submitted to university)
Results of the final M&E activity by the grantor – was the project completed successfully? Were the funds liquidated on time? Was the project terminated prematurely or the request for project extension denied?	Project completed successfully on time. No funds to liquidate (self-funded). No extension needed. Panel approved with "Very Satisfactory" rating. Deployed to DRRMO for use.

\*please add tables if needed

**SUBMITTED BY:**

**ALDRIAN GERALD B. TUNDAG**  
**Printed Name over Signature**  
 Principal Investigator

**NOTED BY:**

**Printed Name over Signature**  
 Head, University Research Council/  
 Institutional Research Board  
 HEI Name

**APPROVED AND ENDORSED BY:**

**Name of Head of Institution (HEI)**  
*(University President or equivalent only)*  
 HEI Name

## **FORM 2 - TERMS OF REFERENCE (TOR)**

**Program/Project Title** : New Student Onboarding Portal (NSOP)

**Principal Investigator** : Aldrian Gerald B. Tundag  
**Implementing Institution (HEI)** : Roberto L. Jalandoni - Silay City College

**Collaborating Institution/s** : (1) Technological University of the Philippines-Visayas (TUPV)  
 (2) Technical Education and Skills Development Authority (TESDA)

**Project Duration** : 7 months  
**Total Project Cost** : ₱145,000.00



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## Objectives

### **General Objective/s**

- General Objectives**

  1. Develop a web-based NSOP system to streamline enrollment and orientation processes for RLJ-SCC's initial batch of students.

### **Specific Objectives:**

- Specific Objectives:**

  1. Replace manual paper-based registration with online forms and automated document processing.
  2. Create digital orientation modules with video guides for technical programs (Electro-Mechanical, Electrical, HVAC-R).
  3. Integrate NSOP with Student Portfolio and Competency Showcase (SPCS) for seamless data transfer.
  4. Train administrative staff to manage the system and generate enrollment reports.

## **Program/Project Scope:**

The scope covers development of a web-based portal for 100-150 initial students, including registration forms, orientation videos, schedule builder, admin dashboard, and SPCS integration. Excludes full Student Information System implementation; focuses specifically on onboarding processes for RLJ-SCC's technical programs.

#### **Project Methods (Sampling, Design and Data Treatment):**

Agile development methodology with 2-week sprints. Convenience sampling of 30 prospective students for needs assessment survey. System design using Django framework for backend and Bootstrap for frontend. Data treatment involves PostgreSQL database storage with Excel analysis for survey results and Django admin reports for system metrics.

**Personnel Requirements/Team Composition & Modus Operandi (including delineation of assignments, coordination/networking arrangements):**

Program/Project Activities	Person Involved/ Institutional Affiliation	Responsibility / Scope of Work	Duration of Involvement/ Time Frame (in days/months)
System Requirements Analysis	Aldrian Gerald B. Tundag/RLJ-SCC	Gather student/staff needs, design database schema	1 month (Dec 2025)
Backend Development (Django)	Aldrian Gerald B. Tundag/RLJ-SCC	Build registration forms, admin panel, SPCS API	4 months (Jan-Apr 2026)
Frontend Development (Bootstrap)	Aldrian Gerald B. Tundag/RLJ-SCC	Create mobile-friendly UI, orientation videos	4 months (Jan-Apr 2026)
System Testing	Aldrian Gerald B. Tundag/RLJ-SCC	Test with 20 sample users, fix bugs	1 month (May 2026)
Staff Training	Aldrian Gerald B. Tundag/RLJ-SCC	Train 10 staff on admin panel usage	1 month (May 2026)

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<b>Deployment &amp; Launch</b>	Aldrian Gerald B. Tundag/RLJ-SCC	Server setup, go-live, monitoring	1 month (Jun 2026)
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**Personnel under Contract of Service**

Person Involved/ Institutional Affiliation	Duties/Responsibilities and Deliverables	Duration of Involvement/ Time Frame
Project Technical Staff One (1) pax	1. Aldrian Gerald B. Tundag/RLJ-SCC   Lead developer: Complete NSOP prototype with all features 2. System testing and bug fixes 3. Staff training materials and workshops 4. SPCS integration and API development 5. Documentation and user manuals	7 months 1 month 1 month 2 months 1 month

(\*please add additional rows, if needed)

**SUBMITTED BY:**

ALDRIAN GERALD B. TUNDAG  
**Printed Name over Signature**  
 Principal Investigator

**REVIEWED AND ENDORSED BY:**

**Name of Head of Institution (HEI)**  
*(University President or equivalent only)*  
 HEI Name

**APPROVED BY:**

---

**Printed Name over Signature**  
 Director IV  
 Office of Planning, Research and  
 Knowledge Management (OPRKM)  
 Commission on Higher Education

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### **FORM 3 - LINE ITEM BUDGET (LIB)**

**Program/Project Title** : New Student Onboarding Portal (NSOP)

**Principal Investigator** : Aldrian Gerald B. Tundag

**Implementing Institution (HEI)** : Roberto L. Jalandoni – Silay City College

**Collaborating Institution/s** : (1) Technological University of the Philippines-Visayas (TUPV)  
(2) Technical Education and Skills Development Authority (TESDA)

**Project Duration** : 7 months

**Total Project Cost** : **PhP 145,000.00**

ITEMS/ PARTICULARS	AMOUNT (PhP)
<b>Maintenance and Other Operating Expenses (MOOE)</b>	
<b>I. Travel/Transportation Expenses</b> (note: local travels only) 1. Local transportation for team meetings and testing 2. Field visits to TESDA partners	5,000.00 3,000.00
	<b>Subtotal</b> <b>8,000.00</b>
<b>II. Supplies and Materials</b> 1. Testing tools and software licenses 2. Printing user manuals and training materials	20,000.00 5,000.00
	<b>Subtotal</b> <b>25,000.00</b>
<b>III. Communication+expenses (mails, internet, mobile cards, etc.)</b> 1. Internet subscription for development server 2. Mobile data cards for team coordination	10,000.00 5,000.00
	<b>Subtotal</b> <b>15,000.00</b>
<b>IV. Meals/Venue and Accommodation (Representation Expenses)</b> (note: local accommodation only) 1. Team meetings and workshop snacks 2. Staff training venue rental	10,000.00 5,000.00
	<b>Subtotal</b> <b>15,000.00</b>
<b>V. Others (PERSONNEL only)</b> Note: budget allocation for PS should not exceed 30% of the requested total budget; only staff with responsibilities that are technical in nature (Form 2: Terms of Reference) can be charged against PS, staff with administrative responsibilities should be charged against administrative cost)	
<u>Honoraria:</u> 1. Project Leader (Principal Investigator) @ P5,000/mo. X 1 pax X 7 months	35,000.00
<u>Contract of Service/s:</u> Project Support Staff @ P0 / mo. X 0 pax X 0 months (student volunteer time)	0.00
<u>Professional Fees:</u> Technical Expert/s (Faculty Advisor consultation)	10,000.00
	<b>Subtotal</b> <b>45,000.00</b>
<b>VI. Publication, Printing and Binding Expenses</b> (to include publication costs in ISI/Scopus indexed journals)	

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ITEMS/ PARTICULARS	AMOUNT (PhP)
1. CHED JIP journal article processing 2. Printing final reports and manual	7,000.00 5,000.00
	<b>Subtotal</b> 12,000.00
	<b>Total MOOE</b> 120,000.00
<b>EQUIPMENT</b> 1. Development Server (for NSOP hosting) (P50,000/item X 1 item) 2. (No other equipment needed - using existing school laptops) 3.	50,000.00 0.00
	<b>Total Equipment</b> 50,000.00
<b>Administrative Cost (5%)</b>	8,500.00
	<b>TOTAL</b> 178,500.00

SUBMITTED BY:

ALDRIAN GERALD B. TUNDAG  
**Printed Name over Signature**  
 Principal Investigator

REVIEWED AND ENDORSED BY:

**Name of Head of Institution (HEI)**  
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 HEI Name

APPROVED BY:

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## **FORM 4 - WORK PLAN**

**Program/Project Title** : New Student Onboarding Portal (NSOP)

**Principal Investigator** : Aldrian Gerald B. Tundag

**Implementing Institution (HEI)** : Roberto L. Jalandoni – Silay City College

**Collaborating Institution/s** : (1) Technological University of the Philippines-Visayas (TUPV)  
(2) Technical Education and Skills Development Authority (TESDA)

**Project Duration** : 7 months

**Total Project Cost** : **PhP 145,000.00**

Activities	Deliverables/Outputs	Due Date
1. Planning & Requirements Gathering	Project plan, database schema (PostgreSQL), server setup   Dec 31, 2025	Month 2-5 (Jan-Apr 2026)
2. System Development	Working NSOP prototype with registration forms, orientation module, schedule builder   Apr 30, 2026	Month 6 (May 2026)
3. Testing & Staff Training	Test report (20 sample users), user manuals, trained 10 staff members   May 31, 2026	Month 7 (Jun 2026)
4. Deployment & Launch	Live NSOP system, SPCS integration, enrollment ready	Jun 26, 2026

**SUBMITTED BY:**

Aldrian Gerald B. Tundag  
**Printed Name over Signature**  
Principal Investigator

**REVIEWED AND ENDORSED BY:**

**Name of Head of Institution (HEI)**  
*(University President or equivalent only)*  
HEI Name

**APPROVED BY:**

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**Printed Name over Signature**  
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## FORM 5 - LOGFRAME

Program/Project Title : New Student Onboarding Portal (NSOP)

Principal Investigator : Aldrian Gerald B. Tundag  
Implementing Institution (HEI) : Roberto L. Jalandoni – Silay City College

Collaborating Institution/s : (1) Technological University of the Philippines-Visayas (TUPV)  
(2) Technical Education and Skills Development Authority (TESDA)

Project Duration : 7 months  
Total Project Cost : PhP 145,000.00

PROJECT SUMMARY	INDICATORS	MEANS OF VERIFICATIONS	ASSUMPTIONS
<b>GOAL:</b> <b>Streamline student onboarding at RLJ-SCC for efficient startup operations</b>	NSOP successfully deployed and used for enrollment	CHED acceptance report, RLJ-SCC endorsement	RLJ-SCC opens in 2025 as planned
<b>OUTCOME(S):</b> <b>Faster enrollment, better accessibility, staff efficiency</b>	Reduced enrollment time from 2 weeks to 1 week; students can access via mobile; staff manage data easily	Enrollment processing records, user surveys, staff feedback forms	Students have basic internet access; staff willing to learn system
<b>OUTPUT(S):</b> <b>Functional NSOP web portal with all features</b>	Working prototype with registration, orientation, schedule builder, admin panel, SPCS integration	System demo, test reports, user manuals	Development team completes coding on time
<b>ACTIVITIES:</b> <b>Planning, development, testing, deployment</b>	4 phases completed within 7 months; ₱145,000 budget utilized	Timeline reports, financial receipts, progress meetings	Funding approved; no major technical issues

SUBMITTED BY:

**ALDRIAN GERALD B. TUNDAG**

Printed Name over Signature

Principal Investigator

REVIEWED AND ENDORSED BY:

**Name of Head of Institution (HEI)**

(University President or equivalent only)

HEI Name

APPROVED BY:

Printed Name over Signature

Director IV

Office of Planning, Research and Knowledge Management (OPRKM)  
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## FORM 6 - SUSTAINABILITY PLAN

**Program/Project Title** : *New Student Onboarding Portal (NSOP)*

**Principal Investigator** : Aldrian Gerald B. Tundag  
**Implementing Institution (HEI)** : Roberto L. Jalandoni – Silay City College

**Collaborating Institution/s** : (1) Technological University of the Philippines-Visayas (TUPV)  
(2) Technical Education and Skills Development Authority (TESDA)

**Project Duration** : 7 months  
**Total Project Cost** : PhP 145,000.00

### A. SUSTAINABILITY PLAN **IMPLEMENTING INSTITUTION:**

**(SAMPLE ILLUSTRATION) Please don't copy**

The NSOP project creates a digital onboarding system for RLJ-SCC's first students, replacing manual paper processes with web-based registration, orientation, and SPCS integration. To ensure long-term operation after CHED funding ends, RLJ-SCC will:

1. Use Special Trust Fund (STF) for annual hosting and maintenance costs.
2. Train IT students to maintain the system through a school IT club.
3. Monitor system usage and update features yearly.
4. Share the open-source code on GitHub for other colleges.
5. Integrate NSOP with future Student Information System (SIS).

AREA OF CONCERN	GOALS/ OBJECTIVES	STRATEGIC ACTIONS	TIME FRAME	BUDGETARY REQUIREMENTS	PERSON RESPONSIBLE
Sustainability Plan for sets of Equipment	Keep server operational for 5+ years	Annual server maintenance contract; backup server setup	Yearly from 2027	₱10,000/year (STF)	IT Staff/RLJ-SCC
Organizational Sustainability?	NSOP serves 500+ students by 2030	Train 5 IT students annually; integrate with SIS; regular updates	2027-2030	₱15,000/year (STF + student labor)	IT Club Coordinator
Community Sustainability?	Share NSOP model with other technical colleges	Open-source code on GitHub; TESDA workshops; CHED presentations	2027 onward	₱5,000/year (travel, materials)	PI/Faculty Advisor

\*Please add rows if needed

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## B. SUSTAINABILITY PLAN

**COLLABORATING INSTITUTION/S:** (1) Technological University of the Philippines-Visayas (TUPV)  
(2) Technical Education and Skills Development Authority (TESDA)

### PROJECT SUSTAINABILITY ACTION PLAN

AREA OF CONCERN	GOALS/ OBJECTIVES	STRATEGIC ACTIONS	TIME FRAME	BUDGETARY REQUIREMENTS	PERSON RESPONSIBLE
Technological University of the Philippines-Visayas (TUPV) / Technical Expertise	Annual NSOP code review and improvements	TUPV faculty review sessions; provide technical guidance	Yearly from 2027	None (in-kind expertise)	TUPV IT Faculty
Technical Education and Skills Development Authority (TESDA) / Program Partnership	Share NSOP as model for NC onboarding	TESDA regional workshops; include in technical college guidelines	2027-2028	₱10,000 (workshop materials)	TESDA Regional Officer

\*Please add rows if needed

#### SUBMITTED BY:

**ALDRIAN GERALD B. TUNDAG**  
Printed Name over Signature  
Principal Investigator

#### REVIEWED AND ENDORSED BY:

**Name of Head of Institution (HEI)**  
*(University President or equivalent only)*  
HEI Name

#### APPROVED BY:

**Printed Name over Signature**  
Director IV  
Office of Planning, Research and Knowledge Management (OPRKM)  
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## FORM 7 - TERMS OF REFERENCE (TOR) FOR THE COLLABORATING INSTITUTIONS

**Program/Project Title** : *New Student Onboarding Portal (NSOP)*

**Principal Investigator** : Aldrian Gerald B. Tundag  
**Implementing Institution (HEI)** : Roberto L. Jalandoni – Silay City College

**Collaborating Institution/s** : (1) Technological University of the Philippines-Visayas (TUPV)  
(2) Technical Education and Skills Development Authority (TESDA)

**Project Duration** : 7 months  
**Total Project Cost** : PhP 145,000.00

COLLABORATING INSTITUTION/ HEI/ SUCs	TERMS OF REFERENCE	DURATION OF INVOLVEMENT/ TIME FRAME
Technological University of the Philippines-Visayas (TUPV)	1. Provide technical consultation on Django and Bootstrap development standards 2. Review NSOP prototype for technical programs (Electro-Mechanical, Electrical, HVAC-R) 3. Offer guidance on SPCS integration for student portfolios	3 months
Technical Education and Skills Development Authority (TESDA)	1. Provide NC program guidelines for orientation module content 2. Review NSOP features for TESDA technical course compliance 3. Support validation of onboarding processes for NC certification	2 months

\*Please add rows if needed

**SUBMITTED BY:**

**ALDRIAN GERALD B. TUNDAG**  
Printed Name over Signature  
Principal Investigator

**REVIEWED AND ENDORSED BY:**

**Name of Head of Institution (HEI)**  
(University President or equivalent only)  
HEI Name

**APPROVED BY:**

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Director IV  
Office of Planning, Research and  
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## APPENDIX: CATEGORY OF RESEARCHERS<sup>1</sup>

### **First Stage Researchers**

These are researchers at an early stage of their research career in universities including doctoral candidates who conduct research under supervision of a principal investigator.

Researchers at this level possess the following characteristics:

- Carry out research under supervision
- Have the expressed intent to develop knowledge of research methodologies and discipline
- Have demonstrated a good understanding of a field of study
- Have demonstrated the ability to produce data under supervision
- Are capable of critical analysis, evaluation and synthesis of new and complex ideas
- Are able to explain the outcome of research and value thereof to research colleagues

### **Early Career Researchers**

These are researchers who are holders of doctorate degrees (Ph.D.), but have not yet established a significant level of independence, experience and competence. They are generally at the beginning of their research careers and have been awarded their Ph.D. for not more than 10 years.

Researchers at this level possess the following characteristics:

- Exhibit all competences of First Stage Researchers
- Have demonstrated a systematic understanding of a field of study and mastery of research associated with that field
- Have demonstrated the ability to conceive, design, implement and adapt a substantial program of research with integrity
- Have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, innovation or application. This could merit national or international refereed publication or patent
- Demonstrate critical analysis, evaluation and synthesis of new and complex ideas
- Can communicate with their peers - be able to explain the outcome of their research and value thereof to the research community
- Take ownership for and manages own career progression, sets realistic and achievable career goals, identifies and develops ways to improve respectability among peers
- Co-author papers at workshop and conferences

### **Established Researchers**

These are researchers who have developed a level of independence.

Researchers at this level possess the following characteristics:

- Exhibit all necessary and most desirable competencies of Early Career Researchers
- Have an established reputation based on research excellence in their field
- Make a positive contribution to the development of knowledge, research and development through co-operations and collaborations
- Identify research problems and opportunities within their area of expertise
- Identify appropriate research methodologies and approaches
- Conduct research independently which advances a research agenda
- Can take the lead in executing collaborative research projects in cooperation with colleagues and project partners
- Publish papers as lead author, organizes workshop or conference sessions
- Establish collaborative relationships with relevant industry research or development groups
- Communicate their research effectively to the research community and wider society
- Are innovative in their approach to research
- Can form research consortia and secure research funding/budgets/ resources from research councils or industry
- Are committed to professional development of their own career and act as mentors for others.

### **Leading Researchers**

These are researchers leading their research area or field, usually leading a team or a group of researchers. In particular disciplines as an exception, leading researchers may include individuals who operate as lone researchers.

Researchers at this level possess the following characteristics:

- Exhibit all necessary and most desirable competencies of Established Researchers
- Have an international reputation based on research excellence in their field
- Have publications in particularly prestigious journals or by leading publishing houses
- Possess work of outstanding originality
- Recipients of competitive grants as Principal Investigators
- External recognition of research quality
- Demonstrate critical judgment in the identification and execution of research activities
- Make a substantial contribution (breakthroughs) to their research field or spanning multiple areas
- Develop a strategic vision on the future of the research field
- Recognize the broader implications and applications of their research
- Publish and present influential papers and books, serves on workshop and conference organizing committees and delivers invited talks
- Are experts at managing and leading research projects
- Are skilled at managing and developing others
- Have a proven record in securing significant research funding budgets/resources
- Can focus on long-term team planning (e.g., career paths for young researchers and securing funding for the team positions)
- Are excellent communicators and networkers within and outside the research community
- Are able to create an innovative and creative environment for research
- Act as professional development role models for others

<sup>1</sup>Based on CMO #52 series of 2016

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### **ATTACHMENT 1**

BRIEF CVs OF RDE PROGRAM/ PROJECT TEAM

### **ATTACHMENT 2**

ETHICAL CLEARANCE CERTIFICATION

### **ATTACHMENT 3**

For SUCs

GOVERNING BOARD (GB) RESOLUTION ON THE APPROVAL AND ENDORSEMENT OF THE PROPOSAL