

OGIP 2026

GUIDEBOOK



INTERNATIONAL OIL RIG DESIGN COMPETITION OGIP 2026

**“Next-Generation Offshore Oil Rig Design:
Integrating Efficiency, High-Integrity Safety, and
Sustainable Engineering to Meet Global Energy
Demand in Harsh Marine Environments”**

Organized By



INSTITUT TEKNOLOGI SEPULUH NOPEMBER
JALAN ITS-SURABAYA 57126
SURABAYA

In Collaboration With



IATMI
INDONESIAN ASSOCIATION OF
TECHNICAL MECHANICAL ENGINEERS



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The Oil and Gas Intellectual Parade (OGIP) stands as the premier annual international event hosted by the Petroleum Engineering Department at University of Pembangunan Nasional "Veteran" Yogyakarta. This gathering brings together hundreds of participants from various disciplines including petroleum, geology, geophysics, environmental studies, chemical engineering, and other related fields from across the globe. The event also features industry experts and practitioners from the oil, gas, and geothermal sectors. In partnership with SPE UPN-SC, IATMI-SM UPN "Veteran" Yogyakarta, INAGA-SM UPN "Veteran" Yogyakarta, and Patrapala Petroleum Adventure, we are delighted to introduce the 18th edition of OGIP 2026, centered around the theme "Breaking the Barrier to Empower Future Engineers in Driving Sustainable Energy Development".

This event offers a platform for both students and industry professionals to engage in discussions about sustainability within the oil and gas sector. It provides students with an excellent opportunity to showcase their expertise, ingenuity, innovation, capabilities, and community engagement in alignment with Tri Dharma Perguruan Tinggi principles through various activities including CEO Talk, Software Workshop, Grand Seminar, Company Visit, Social Activities, Intellectual Competitions, and Awarding Night.

We aim to establish a knowledge-sharing environment that prepares emerging talent for the innovative era of progressive energy development in the oil and gas industries. By bringing together students and professionals in a single venue, we envision creating a collaborative space where both groups can exchange ideas on sustaining and enhancing our energy resources and human capital to support manufacturing industries, generate employment opportunities, and advance energy sustainability.

Regards,
President Director of OGIP 2026



Muhammad Bachtiar Hasri Putra
NIM. 113 220 082

Background

The International Oil Rig Design Competition (ORDC) is one of the flagship intellectual competitions of OGIP 2026, designed to challenge undergraduate students to develop innovative, comprehensive, and technically sound offshore oil rig designs. As offshore exploration and production activities continue to expand into deeper waters and more complex geological settings, the oil and gas industry faces increasingly demanding operational conditions, including harsh marine environments, higher safety risks, and stricter environmental regulations. These challenges require future engineers not only to master fundamental engineering principles, but also to possess the ability to integrate efficiency, safety, sustainability, and economic considerations into a single, well-balanced engineering solution.

ORDC was initiated to provide a competitive academic platform where students can apply multidisciplinary engineering principles—ranging from drilling systems and structural design to health, safety, security, environmental protection, and economic feasibility—into a comprehensive offshore rig design. This competition encourages participants to think beyond conventional solutions and propose future-oriented designs that respond to real-world industrial challenges.

By organizing ORDC at an international level, OGIP aims to foster global collaboration and intellectual exchange among engineering students from diverse academic and cultural backgrounds. The competition serves as a platform to elevate engineering standards, promote the adoption of future-oriented offshore technologies, and prepare participants to face the evolving demands of the global energy industry. Through ORDC, participants are expected to develop strong technical competence, critical thinking, and professional responsibility—key attributes required of future engineers who will contribute to safe, efficient, and sustainable offshore energy development.



Theme of Event

The theme of this Oil Rig Design Competition is:

“Next-Generation Offshore Oil Rig Design: Integrating Efficiency, High-Integrity Safety, and Sustainable Engineering to Meet Global Energy Demand in Harsh Marine Environments.”

General Rules

1. The OGIP 2026 International Oil Rig Design Competition will be held on 2nd of May 2026
2. This competition is widely open for active undergraduate students from any universities around the globe which are related to Oil and Gas Industry.
3. Participants are advised to complete and submit the official registration form OGIP 2026 before the due date.
4. Participants have to comply with all the rules to join the competition, or else will be disqualified.
5. Each team that represents their university will consist of 5 members which will be guided by one team leader and each of the team member can only participate in one of the competitions.
6. Each university is limited to two representative teams in the final stage.
7. Each team is mandatory to make a team name with a logo that represent the team. The name and logo will be used in report and presentation. Any attribute or logo from universities are prohibited.



8. After submitting the final report and presentation slide, the team leader is requested to verify the submission to our contact person.
9. Competition rules are subject to change. If any rules change, there will be an announcement that will be sent through email or the team leader's contact. Clarification and change of agenda will be informed before the due date of competition.



A. Competition Day Rules

1. Participants must attend the presentation day and cannot be replaced by other.
2. The presentation and Q&A session must be delivered in English.
3. Participants are prohibited to use any university attribute and mention university identities.
4. During presentation and Q&A, any external assistance is prohibited.
5. Each team will be given 5 minutes of preparation, 10 minutes of presentation, and 30 minutes of Q&A session.
6. Each team is responsible to display their own presentation file. The displayed file should not be different with the submitted file.
7. Competition officials:
 - Judges: There will be three judges.
 - Moderator
 - Timekeeper
 - Host
8. Teams who fail to comply with rules will be given a 10%-point reduction.
9. Other rules will be represented at the technical meeting day, which will be held on 30th of April 2026.



B. Judging Criteria Preliminary

The judges will choose seven best teams according to the criteria as shown below:

1. Project Report (limited to 70 pages): 100%

a. Technical Aspects:

- Rig specifications and capacity
- Standardized rig material and components relevant with the real field applications
- Rig layout
- Optimized drilling plan

b. Health, Safety, Security, and Environment (HSSE) Aspects:

- Compliance with regulations
- Operational risk management and security
- Environmental impact and waste management

c. Innovation Aspects:

- The utilization of relevant and efficient technology
- Ergonomic rig design
- Integration of marine indicators to support operational monitoring
- Strong emphasis on HSSE-related innovation

d. Economic Aspects:

- Durability and maintenance cost
- Overall cost-efficiency



C. Judging Criteria Final

The judges criteria are as follows. Note that in the final stage, the criteria may emphasize more detailed considerations due to the increased complexity of the case.

1. Project Report: 50%

a. Technical Aspects:

- 1) Rig specifications and capacity
- 2) Standardized rig material and components relevant with the real field applications
- 3) Rig layout
- 4) Optimized drilling plan

b. Health, Safety, Security, and Environment (HSSE) Aspects:

- 1) Compliance with regulations
- 2) Operational risk management and security
- 3) Environmental impact and waste management

c. Innovation Aspects:

- 1) The utilization of relevant and efficient technology
- 2) Ergonomic rig design
- 3) Integration of marine indicator to support operational monitoring
- 4) Strong emphasis on HSSE-related innovation

d. Economic Aspects:

- 1) Durability and maintenance cost
- 2) Overall cost-efficiency



2. Presentation and Q&A: 30%

- a. Project Report: the assessment will be focused beyond the substance of the aspects in the project report such as design, completeness of the information contained, detailed explanations, summarizing ability, information synthesis both in the project report and 3D model.
- b. Presentation Skills: assess the participants' ability to present the results of their work interactively, the ability to convey ideas and arguments, the strength of the arguments given, time management, and the manners in the presentation and Q&A.

3. Load and Buoyancy Test: 20%

- a. Load and Buoyancy Test & 3D Model: refers to the tests carried out on the rig to ensure the rig structure can withstand operational loads and remain stable against buoyancy in the water.

4. Judges' decisions are absolute and not contestable,

and the winner will be announced at OGIP 2026 Awarding Night.



A. Case Distribution

The Preliminary Case will be given to the participants on 1st of March 2026, and the participants do the preliminary stage by working on the abstract after the preliminary case is given. The final stage case will be given to participants who have passed the abstract or preliminary stage.

B. Preliminary Project Report

1. The report must include all parts of the case report without page restrictions (background, case analysis, conclusion, and solution).
2. Abstract must be written in English.
3. Only team and member identities are allowed. Any university identities and attributes are prohibited.
4. Abstract should be submitted before 28th of March 2026 in .pdf format to <https://ogip2026.id/> with subject and file name of: IORDCOGIP2026_Abstract_Team Name.
5. The seven (7) best preliminary project report will be qualified to the final round.
6. Teams that qualified to the final round will be announced on 5th of April 2026.



C. Final Project Report

1. Project Report must be written in English.
2. Project Report should include:
 - a. Field Overview
 - b. Drilling Plan
 - c. Drilling Components (Power System, Hoisting System, Rotary System, Circulation System, and Blowout Preventer System)
 - d. Health, Safety, Security, and Environment (HSSE) Analysis
 - e. Innovation
 - f. Economic Analysis
 - g. Summary & Conclusion
 - h. References
3. The Project Report file should be submitted before 30th of April 2026, in .pdf format to <https://ogip2026.id/> with the subject and file name of: IORDCOGIP2026_Project Report_Team Name.
4. Teams who fail to comply with the rules will be given a 10%-point reduction.



D. Final Presentation

1. Final Presentation must be written in English.
2. Only team and team member identities are allowed. Any university identities and attributes are prohibited.
3. Final presentation file must include content from the project report. Displaying different data or changing data is prohibited.
4. Each team will be given 5 minutes of preparation, 10 minutes of presentation, and 30 minutes of Q&A session.
5. The Final Presentation file should be submitted before 30th of April 2026, in .pptx format to <https://ogip2026.id/> with subject and file name of: IORDCOGIP2026_Final Presentation_Team Name.
6. Teams who fail to comply with the rules will be given a 10%-point reduction.



1. OGIP 2026 International Oil Rig Design Competition registration can be accessed through <https://ogip2026.id/> and submit the proof of your payment directly to the website provided.

2. Registration fee:

Early bird	: IDR 150.000,- / USD 9, each team
Normal registration	: IDR 200.000,- / USD 12, each team
Extended registration	: IDR 250.000,- / USD 15, each team
Final Round	
Non-full accommodation	: IDR 450.000,- / USD 27, each person
Full accommodation	: IDR 650.000,- / USD 39, each person

The teams that are qualified to the final round must fulfill the payment 7 days after the Official Delegates Announcement. Refer to the IDR registration for domestic delegates and USD for international delegates. Kindly make the payment to one of the following accounts:

Account number: 0078 4206 1728

Bank name : Blu by BCA Digital

Account name : ATRINDIA HASIBAH ROFIANINGTYAS

For international students

Paypal : <https://paypal.me/MeyandaKeisha>

Account name : @MeyandaKeisha



1. Open Registration : January 24th – 31st, 2026
2. Normal Registration : February 1st – 22nd, 2026
3. Extended Registration : February 23rd – 28th, 2026
4. Preliminary Case Distribution : March 1st, 2026
5. Preliminary Case Submission : March 27th, 2026
6. Finalist Announcement : April 5th, 2026
7. Final Case Distribution : April 5th – 11th, 2026
8. Final Case Submission : April 29th, 2026
9. Technical Meeting : April 30th, 2026
10. Competition Day : May 2nd, 2026

Awards

1. Champion : IDR 5.500.000,- / USD 330 + Certificate
2. 1st Runner Up : IDR 3.500.000,- / USD 210 + Certificate
3. 2nd Runner Up : IDR 2.000.000,- / USD 120 + Certificate
4. Favorite Winner : IDR 500.000,- / USD 30 + Certificate



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