# Ir. Yosica Mariana, S.T., M.T., IPU., ASEAN Eng.

**Senior Faculty Member and Design Practitioner**

0813.19991144 | ymariana@binus.edu | Kebayoran Lama, Jakarta Selatan
LinkedIn: www.linkedin.com/in/yosica-mariana/



## *PROFILE SUMMARY*

Yosica Mariana is a senior academic and design practitioner with over 25 years of experience in architecture, product design engineering, and multidisciplinary education. She currently serves as the Head of Product Design Engineering Program at BINUS ASO School of Engineering, where she integrates advanced design thinking, digital technology, and user-centered innovation into the higher education curriculum.
Her expertise spans architecture, interior design, AI-integrated product systems, IoT prototyping, and sustainable urban design, supported by extensive research in health technology, green architecture, and community-based design. She is a registered Professional Engineer (IPU) and a certified ASEAN Engineer, actively contributing to Indonesia's academic and innovation landscape.

## *SKILLS*

- Design and Creative Thinking
- Digital Design Tools
- Sustainable and Eco-Friendly Design
- Time Management
- Team Collaboration
- Effective Communication
- Critical Thinking
- Problem Solving
- Project Management

## *PROFESSIONAL EXPERIENCE*

**Head of Product Design Engineering Program | BINUS University | 2019 – Present**

- Leading academic and operational activities of the Product Design Engineering Program to align with university quality standards.
- Coordinating curriculum development and fostering collaboration with internal and external partners.
- Ensuring the timely graduation of students with strong employability skills

**Head of Architecture Studio | BINUS University | 2013 - 2019**

- Managing and coordinating academic studio activities related to final projects in the Architecture Department.
- Ensuring the quality of studio operations, supporting research, community service, and faculty development.
- Maintaining stakeholder satisfaction through service excellence.

**Subject Content Specialist (Part-time, 20 hours per week) | BINUS University | 2010 - 2013**

- Developed and updated course content materials to support academic quality standards.
- Monitored lecturer activities, ensuring alignment with curriculum objectives and academic policies.
- Provided academic advisory services to students to support their educational progress.
- Managed the collection and organization of course materials for assessment and evaluation purposes.

**Lecturer | BINUS University | 1997 - Present**

- Teaching and mentoring undergraduate students in architecture and design subjects.
- Conducting research, community service, and professional development initiatives.
- Actively contributing to curriculum planning and academic quality assurance

**Project Manager | Jaya Makmur Abadi | 2001 - 2013**

- Managing the overall operations and decision-making process for construction and development projects (offices, cafe, restaurants, exhibitions, etc)
- Leading project planning, procurement, and staff supervision to ensure project quality and client satisfaction.
- Developing and expanding business opportunities while maintaining professional ethics and operational standards

**Head of Interior Division | Ekamitra Talentama | 2000 - 2002**

- Leading the Interior Division operations, from design supervision to production quality control.
- Planning, coordinating, and supervising project activities, including MEP and HVAC integration.
- Managing contractor and supplier relationships to ensure project specifications and deadlines were met.

**Site Manager | Intidasa Perkasa (vendor under Indomobil Sukses Mandiri) | 1996 - 1998**

- Planning and coordinating construction activities for building projects, ensuring compliance with project specifications.
- Managing site operations, liaising with consultants, subcontractors, and internal teams.
- Monitoring construction quality, safety protocols, and reporting project progress.

**Sales Manager | John Hancock Insurance | 1998 - 2000**

- Managing sales operations and building client relationships within the insurance sector.
- Leading a team of sales associates and achieving targeted sales growth.

## *NON PROFIT / COMMUNITY EXPERIENCE*

**2017 - 2022 | Architectural team (Panitia Pembangunan Gereja Paroki)**

- Assisted in the development of design concepts and layout plans for the church building, in line with liturgical functions and community needs.
- Provided technical input on material selection, space planning, and architectural detailing.
- Supported communication and coordination between the construction team and the parish to ensure smooth project execution.

## *EDUCATION*

**2020 | Professional Engineer Program | Binus University**

- Major in Professional Engineering
- Thesis on "Evaluation of the Renovation Project Implementation of St. John the Evangelist Church Using CPM and PERT Methods".

**2009 - 2013 | Master of Engineering | Trisakti University**

- Major in Architectural Engineering
- Thesis on "Physical Changes in the Area due to the Presence of the Bina Nusantara Campus".

**1991 - 1996 | Bachelor of Engineering | Tarumanagara University**

- Major in Architectural Engineering
- Thesis on "Design of Ngurah Rai International Airport Terminal, Bali"

## *RESEARCH PUBLICATIONS*

- Healing Garden Implementation in Rehabilitation Centre at Jakarta as a Concept of Eco-Architecture Design. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 426 (2020).
- Redesign Pedestrian-Way in Blok M Area as a Pathway of Sustainable Urban Mobility. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 426 (2020).
- Portable architecture studio recording video as a solution for space limitation. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 426 (2020).
- The implementation of biophilic design in co-working space design as a concept of healthy, sustainable architecture. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 426 (2020).
- Perforated metal made from recycled material in the application of building façade. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 426 (2020).
- Development of Tourist Village with the Implementation of Experiential Landscape in Pari Island. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 794 (2021).
- Bamboo as local material for hotel interior finishing. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 794 (2021).
- Daylighting simulation analysis for sun shading on hotel design in West Jakarta. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 794 (2021).
- Project Evaluation and Review Technique (PERT) Analysis in the renovation project of the Church of St. John the Evangelist, Jakarta. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 794 (2021).
- Solar radiation on photovoltaics panel arranging angles and orientation. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 794 (2021).
- The Jakarta society's perspectives on Architechnopreneurship design. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 794 (2021).
- Sustainability in West Java traditional house: A case study from Julang Ngapak House. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 998(1) (2022).
- The Role of Virtual Reality in Green Building Design. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 998(1) (2022).
- Horticultural exhibition with experiential landscape approach in Mekarsari Tourism Park. Proceeding International. AIP Conference Proceedings Vol. 2594 (040002) (2023).
- Redevelopment of pujaseri culinary center in muara angke. Proceeding International. AIP Conference Proceedings Vol. 2594 (080007) (2023).
- Hospice for cancer patients with the application of therapeutic garden in West Jakarta. Proceeding International. AIP Conference Proceedings Vol. 2594 (040003) (2023).
- Post-stroke rehabilitation center with healing garden approach in Jakarta. Proceeding International. AIP Conference Proceedings Vol. 2594 (040005) (2023).
- Double skin facade effect on optimizing daylighting in SOHO apartment South Jakarta. Proceeding International. AIP Conference Proceedings Vol. 2594 (040011) (2023).
- Automatic Anti-Swing Gantry Crane Based on Gradient Descent Optimization Proportional Integrated Derivative (PID): A Comparison Simulation and Real Experiment. Proceeding International. Proceedings of the International Conference on Electrical Engineering and Informatics, IEEE (2023).

- Intelligent Small Scale Autonomous Vehicle Development Based on Convolutional Neural Network (CNN) for Steering Angle Prediction. Proceedings International. International Conference on Innovative Technologies in Intelligent Systems and Industrial Applications (2023).
- Evaluation of Branding Strategy in Automotive Industry Using DEMATEL Approach. Proceedings International. International Conference on Innovative Technologies in Intelligent Systems and Industrial Applications (2023).
- Mixed-Use Building with Threshold Space Approach in Central Jakarta. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 1169(1) (2023).
- Design of Workstation for Remote Workers with Work Environment Consideration. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 1169(1) (2023).
- Sustainable product and service systems engineering: Engineering multidisciplinary and stakeholder's perspectives on strategic marketing. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 1169(1) (2023).
- Minimizing Defects in Radiator Grille Upper Garnish Parts using Six Sigma (DMAIC) at PT. AAS. Journal Sinta 4. Engineering, Mathematics and Computer Science Journal (EMACS), Vol.5 No.3 September 2023.
- Automatic Cataract and Cholesterol Detection System Based on Recurrent Neural Network (RNN): A Comparison with CNN and SNN. Proceedings International. 19th International Conference of Intelligent Unmanned Systems, ICIUS (2023).
- Development of Detection Kidney Function Stand Alone System and Design based on Oral Ammonia Levels. Proceeding International. Proceedings 7th IC2IE 2024.
- Development of Detection Lung Disease Stand Alone System Based on Convolutional Neural Network (CNN). Proceeding International. Proceedings 7th IC2IE 2024.
- Enhancing Indoor Well-being: A Multifunctional Approach to Indoor Living with Plants and Pegboards. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 1324 (2024).
- Integrated Approach for Early Detection and Prevention of Abnormal Child Growth: A Kansei Design and Quality Function Deployment Study. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 1324 (2024).
- Designing Sustainable and Health-Focused Learning Environments: Adaptive Educational Furniture for Students with Scoliosis. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 1488(1) (2025).
- Energy-Efficient Apartment Design through Passive Cooling Strategies in Central Jakarta. Proceedings International. IOP Conf. Series: Earth and Environmental Science Vol. 1488(1) (2025).

## *ADDITIONAL INFORMATION*

**Certifications:** Principal Professional Engineer certification (IPU), ASEAN Engineer certification.