

# PNU: Empowering Women to Shape the Future of Saudi Arabia



Princess Nourah bint  
Abdulrahman University

2025



PNU, the world's largest university for women, is recognized for leadership in education and scientific research



Priorities include collaboration with industry, promoting innovation and nurturing future female leaders



The university's 2030 strategic plan seeks to accelerate progress toward the Kingdom's Vision 2030 roadmap



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# Introduction to PNU

Established in 2008, Princess Nourah bint Abdulrahman University (PNU) has grown into the world's largest university for women, recognized for its leadership in education and scientific research. With 19 colleges and over 120 academic programs, the university has played a pivotal role in building a national knowledge economy through community and global partnerships.

PNU's growth is guided by four core values: agility, to ensure efficiency and flexibility in continuous development; pioneering, to drive future excellence through demonstrating initiative and leadership; awareness, reflecting a commitment to national and humanitarian duties through responsibility, citizenship and empathy; and growth, focusing on building capabilities and fostering a team spirit that encourages innovation and lifelong learning. PNU's values align with Saudi Arabia's long-term development plan, Vision 2030 – emphasizing the advancement of scientific research and human capital development, particularly by increasing women's participation in these fields to enhance national knowledge and quality of life. PNU's 2030 strategic plan seeks to accelerate this vision, centered on four key pillars.

The first pillar emphasizes innovative technologies, creating an environment that enhances the university's output and its responsiveness to emerging needs. The second pillar focuses on fostering a healthy community through cooperation and integration across all university sectors to promote health awareness and national values. The third pillar is fostering Saudi culture and national identity across all its programs and initiatives. Through curricula, community engagement and campus life, the university ensures that students embody national values, cultural pride, and a strong sense of belonging rooted in the Kingdom's heritage and Vision 2030. Most importantly, the fourth pillar is dedicated to empowering women by instilling leadership and excellence, supporting Saudi women in education and professional development, enhancing their social status and increasing their participation within the labor market.

## Who is Princess Nourah bint Abdulrahman?

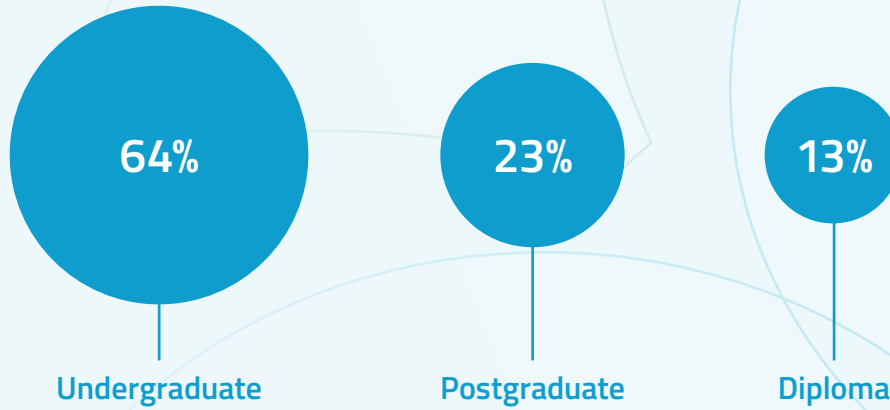
Princess Nourah bint Abdulrahman Al Saud (1875-1950), whom the university is named after, was a distinguished figure in Saudi history, known for her wisdom, intelligence and strong character. As the sister of King Abdulaziz, the founder of modern Saudi Arabia, she played a prominent role within the royal family, earning respect for her thoughtful insights and contributions. In recognition of her legacy and influence, PNU – the largest women's university in the world – was named in her honor, symbolizing her enduring impact on Saudi society and the advancement of women's education.



Princess Nourah bint  
Abdulrahman University

Her signature, taken from a letter she wrote to her brother, King Abdulaziz, was incorporated into the new PNU logo designed in 2019 to represent the university's pride in being named after this extraordinary woman.

### Academic Programs at PNU



Source: PNU

### Four features of PNU's excellence

 <p>The largest women's university in the world</p>	 <p>Innovative, with cutting-edge technologies</p>
 <p>Community engagement</p>	 <p>Global outreach</p>

Source: PNU

### PNU in facts and figures

<b>37,000+</b> students	<b>19</b> colleges and institutes
<b>2000+</b> faculty	<b>100+</b> local partnerships
<b>120+</b> academic programs	<b>25+</b> community partnerships
<b>8m sq meter</b> area	<b>25+</b> international partnerships
<b>900+</b> faculty in STEM and health – <b>44%</b> of all PNU faculty	
<b>13,000+</b> students in STEM and health – <b>36%</b> of all PNU students	

Source: PNU

# Historical context



## Tracing the evolution of women's education in Saudi Arabia since 1960

Originally established as Saudi Arabia's first education college for women in 1970, Princess Nourah bint Abdulrahman University (PNU) became a university in 2008. PNU's development mirrors the broader milestones in women's education in Saudi Arabia. Women's higher education in the Kingdom began relatively early compared to both men's higher education and women's primary education. King Saud University, the first comprehensive higher education institution, was established in 1957. Although the first public school for girls opened in 1959, the first female student was admitted to King Saud University in 1961 – just four years after the founding of the university.

Early access to higher education had a significant impact. By 1998 women outnumbered men in higher education (with a share of 51% to 49%) and their representation continued to grow, reaching a share of 59% by 2004. Today, women

still constitute over 50% of university students in the Kingdom. During 2010-19, the number of female students surged by 44%, with 163,000 enrolled in 2018 – up from four in 1961. The education sector is also a major employment source for women: 83% of female government employees work in education, while female faculty members account for 43% of teaching staff in Saudi universities.

Saudi Arabia's emphasis on women's education has driven improvements in other areas of education. Enrollment in primary education reached 2.5m students after it was made compulsory for ages six to 15 in 2004. Literacy rates among Saudi women aged 15 and above jumped to 96% in 2022, up from 57% in 1992 – marking an increase of almost 40 percentage points in only 30 years. Graduation rates have also seen substantial increases. The number of female bachelor's degree graduates doubled in 2010-18, while female postgraduate degree graduates increased fourfold. Consequently, the Saudi education sector scored 0.86 on the National Observatory for Women's Participation in Development Index.



## PNU's progress and key indicators related to women's empowerment in Saudi Arabia

- 1955**  
The first school for girls in the Kingdom, Dar Al Hanan, opened in Jeddah
- 1957**  
A royal decree instituted schooling for girls in the Kingdom
- 1970**  
A group of education colleges focusing on teacher preparation were established across the Kingdom. Those in Riyadh were later merged to become PNU.
- 1970s**  
Literacy rates for women stood at 2%. The oil boom subsequently led to a push for expanding women's education.
- 2008**  
PNU was designated as a university by royal decree
- 2011**  
Saudi women were allowed to vote and run for office in municipal elections for the first time
- 2013**  
A female, Noura Al-Fayez, was appointed as deputy minister for women's education for the first time
- 2013**  
Saudi Arabia achieved a historic milestone by appointing 30 women to the Shura Council – a consultative body to the king – and granting them 20% representation for the first time. Five faculty members from PNU were among this cohort.
- 2021**  
The world's first all-women Apple Developer Academy, and the first of its kind in the MENA region, was established at PNU
- 2021**  
PNU entered international academic rankings for the first time
- 2021**  
Saudi Arabia made considerable progress in the World Bank's "Women, Business and the Law" report, achieving a score of 80 out of 100 – up from 70.6 in 2020
- 2019**  
Guardianship laws were amended to allow women more rights
- 2018**  
PNU established the first public college of engineering for women in Saudi Arabia
- 2017**  
PNU inaugurated the first driving school for women in Saudi Arabia
- 2017**  
The Kingdom's driving ban on women was lifted, allowing them to drive legally
- 2016**  
Saudi Arabia launched Vision 2030, including goals to increase women's participation in the workforce and education

Source: PNU



# Pat Bosch

**Design Director, Perkins & Will;  
PNU Campus Design Lead**

**Which aspects inspired your design philosophy for constructing the indoor and outdoor spaces at PNU?**

The project encompassed 30m sq feet, making it the largest women's university globally. The design philosophy stressed flexibility and adaptability to meet the needs of third-generation higher education. We aimed to create facilities that can grow smarter rather than larger, accommodating 25,000 students at first, later expanding to 62,000. Our approach emphasized interconnectivity and innovation to foster multidisciplinary learning while symbolizing female empowerment.

**How did you balance cultural identity with innovative design elements?**

Representing the cultural identity of Sau-

di women was essential. The design mirrors their journey, starting with veiled, screened exteriors that gradually transition to inward transparency, representing empowerment and freedom. Functional *mashrabiya* screens honor tradition while adding modern utility. The open inner sanctum reflects progress and inclusivity, while the interconnected layout fosters collaboration, creating a dynamic and multidisciplinary environment.

**What challenges did you face in designing PNU regarding climate and sustainability?**

Addressing the climate required integrating critical regionalism into the design. Including local materials such as golden stone and concrete, which absorb and dissipate heat effectively, were key. Design strategies such as covered courtyards and veils acting as horizontal and vertical shading devices achieved 32% energy savings. Incorporating traditional construction techniques alongside modern sustainability practices resulted in a high-performance, gold-certified campus harmonized with its environment.

**How does the campus design address accessibility and inclusivity as a symbol of female empowerment?**

Inclusivity is embedded in the campus' philosophy. Security thresholds allow women to shed their veils within a secure space. The building layouts foster collaboration and a sense of community. The design highlights the importance of female education, positioning PNU as an anchor for empowerment and learning.

# How PNU promotes UN SDG 5: Gender Equality in KSA

Women's empowerment has been key to achieving a thriving economy since the 2016 launch of Vision 2030. This roadmap includes several programs designed to enhance women's roles in development and address gender gaps across various sectors. Objectives include increasing women's participation in the workforce, reducing female unemployment rates and improving the Kingdom's global competitiveness rankings – for which gender gap reduction is crucial. Women's participation in the job market has increased from 17% at the time of the roadmap's launch to 36% today. This has led to a more diversified workforce – a cornerstone of Vision 2030. PNU plays a pivotal role in advancing the female-related objectives of Vision 2030. The university prioritizes national initiatives to empower women, guided by a council of prominent leaders from both within and outside the institution, dedicated to enhancing women's roles and contributions in the Kingdom. PNU is also actively embedding the UN Sustainable Development Goals (SDGs) into its curricula, with key efforts including training 17 faculty members at the UN University and establishing Saudi Arabia's first master's of the arts program in women's studies.

## Spotlight: New Focus at the College of Languages

The College of Languages has transformed into a hub for multilingual and multicultural education centered on sustainability and global citizenship from a national perspective. It aspires to cultivate global citizens who possess multilingual proficiency, intercultural competence and enhanced employability. By integrating the SDGs into the curriculum, extracurricular activities and community service, the college enables students to leverage their linguistic expertise and cultural knowledge to communicate effectively across diverse contexts. With a strong focus on innovation, collaboration and ethical practices, the college empowers students to address global challenges while cultivating a sense of responsibility toward their communities. SDGs and global issues are woven into the academic and extracurricular programs, enabling students to apply their knowledge in real-world scenarios, and enhancing their cultural and global awareness.

# PNU's supportive ecosystem for women's empowerment

PNU fosters women's empowerment through various initiatives designed to advance the role of females in society. The National Observatory for Women focuses on measuring and enhancing women's participation in national development, while the Princess Nourah Prize for Women Excellence honors Saudi women who have made notable contributions across different fields. The Sarah Al-Sudairi Center for Women Studies (see page 30) is dedicated to gender studies and supports scientific research projects, particularly those on Saudi women in the workplace.

With respect to female students, PNU promotes skill development and leadership through a range of initiatives. Among these, the Smooq program aims to strengthen the professional capabilities and life skills that are essential for the 21st century, aligning with Vision 2030's Human Capabilities Development Program. Smooq focuses on skills and values through a professional development journey from a student's admission to graduation. The Student Advisory Council provides opportunities for students to develop leadership, personal and administrative skills through biennial elections. These efforts are designed to engage students in decision-making and university activities while building their confidence through training. In addition, 34 student clubs nurture talent, innovation and creativity.

## Spotlight: Athletics at PNU

Athletics provides an excellent platform for developing leadership skills among students. Since 2019 PNU has prioritized student engagement in athletic activities, achieving a remarkable 400% growth – with over 70,000 students participating. This commitment earned PNU first place in the Sports and Physical Activity Performance Index among Saudi universities in 2022, 2023 and 2024.

Number of competitive sports	16
Number of college sports teams	19
Number of sports activities	600+

# Case study: National Observatory for Women, based at PNU

Supporting and enhancing women's participation, as well as promoting related elements of social development, relies on the effective monitoring and measurement of indicators related to the roles and societal impact of women. The National Observatory for Women, based at PNU, is a national center of expertise dedicated to tracking the contributions of Saudi women to development – both locally and globally. The observatory utilizes the Women Participation in Development Index. This composite, weighted local index measures women's involvement across five key areas: education, health, economy, governance and society.

By applying international standards and precise scientific methodologies implemented by a team of experts in research, analysis and measurement, the observatory generates detailed, accurate and regularly updated local indicators. The data and studies produced help to identify gender gaps, contribute to SDG progress and inform national policy proposals, while also enhancing Saudi Arabia's standing in international classifications regarding female participation.





In addition to its measurement work, the observatory organizes conferences, workshops, seminars and international collaboration. The facility also celebrates events such as International Women's Day, conducts dialogue sessions on female empowerment and publishes research studies targeting specific issues related to women's empowerment – exploring matters within the Kingdom and beyond.

## Women Participation in Development Index\* in Saudi Arabia, 2019-23

	2019	2023
<b>Women Participation in Development Index</b>	<b>0.64</b>	<b>0.72</b>
<b>Economic pillar</b>	<b>0.52</b>	<b>0.58</b>
<b>Social pillar</b>	<b>0.79</b>	<b>0.79</b>
<b>Organizational pillar</b>	<b>0.26</b>	<b>0.48</b>
<b>Educational pillar</b>	<b>0.75</b>	<b>0.86</b>
<b>Health pillar</b>	<b>0.89</b>	<b>0.86</b>

\* The Women Participation in Development Index offers periodic assessments of women's contributions across key areas vital for achieving the Kingdom's Vision 2030 objectives. It highlights areas in need of support and impacts Saudi Arabia's rankings in international evaluations.

Source: Women's Participation in Development Index

# Present-day focus: PNU's commitment to enhancing female leadership

The establishment of the Women's Leadership Center (WLC; see page 19) at PNU stemmed from a recognition that a one-size-fits-all approach to leadership training no longer serves women's unique needs. Imported leadership training programs do not align with the local environment or the specific challenges faced by women in Saudi Arabia. Recent shifts, such as the increase in women's participation in the workforce, the emergence of mixed-gender workplaces and women taking on higher leadership roles with greater responsibilities, necessitated a fresh perspective on female leadership training.

PNU executed the Leadership Training and Coaching Program for Women Leaders, which aimed to train 1700 Saudi women leaders under the National Transformation Program. This included leadership assessments, coaching sessions and specialized training delivered in collaboration with INSEAD. PNU analyzed participant feedback, allowing valuable insights into the leadership development needs of Saudi women. Additionally, the registration process – through which over 3000 applicants applied, among whom 1700 were selected – included detailed questions that helped to better understand the leadership experiences and workplace challenges women face.

The data collected enabled the university to craft a tailored leadership program specifically designed for women in the local work environment: the Women's Leadership Development Program, or QIADYA. This evidence-based initiative combines global expertise with local approaches, offering leadership coaching, interviews with successful Saudi leaders, workshops, business simulations and virtual reality experiences. This initiative served as the foundation for the WLC. Another PNU initiative focused on promoting female leadership is Qudwah. This mentorship scheme supports women leaders by pairing them with experienced mentors to help enhance their leadership skills and expand their professional networks. Since its launch in 2022, the six-month program has guided 321 mentees through coaching sessions, workshops and events. The fourth and most recent cohort commenced in October 2024.

# PNU's organizational culture nurtures women leaders

PNU goes beyond specialized centers, academic programs and leadership training for faculty and staff in a move to actively empower women leaders across its organizational structure. As an all-women university led and managed entirely by women, PNU serves as a launching pad for many female leaders – both within and beyond the university – who later assume prominent national leadership roles. Faculty and staff often pass through PNU on their journey to such positions, underscoring its effectiveness as a leadership incubator.

The university is a living example of how women can thrive and develop leadership skills in an all-women environment. At every level – from department heads to deans, vice presidents and the university president – almost all leadership roles are held by women, creating a training ground for aspiring leaders. This unique environment not only nurtures leadership skills but also provides a safe, supportive space with strong role models to inspire the next generation of women leaders.

Within this context, PNU has emerged as a crucial catalyst for women's leadership on a national scale. For instance, the director of the Royal Institute of Traditional Arts is a former faculty member of PNU's Art and Design Department. Meanwhile, the former dean of PNU's Business School is now spearheading the establishment of the Kingdom's first Institute of Public Policy under the Ministry of Energy, further exemplifying the national influence of the university. Additionally, the current president of Taibah University previously held leadership roles at PNU, while the secretary-general of the Family Affairs Council also held a leadership role at PNU. These achievements illustrate that PNU has played an important role in nurturing leadership across various fields as the Kingdom pursues Vision 2030.

First cohort in the Kingdom's Shura Council	Five members from PNU
Number of national women leaders who are, or have been, PNU faculty	200+



## Nawal Alrasheed

**President, Taibah University; Former Dean of Pharmacy and Vice President for Academic Affairs, PNU**

How did your time at PNU influence your vision for promoting research and development within your own university?

My tenure at PNU deeply influenced my vision for advancing research and development among female faculty and students at Taibah University. At PNU, I witnessed the transformative power of a well-established research ecosystem, with highly skilled faculty and students with advanced technology, funding and access to international research networks. The alignment of research with national goals, particularly Vision 2030, demonstrated how impactful research can contribute to economic development. These experiences shape my approach at Taibah University, where I prioritize building research capacity and providing

robust support structures for female researchers. This includes fostering collaboration, enhancing resources and creating initiatives that empower women to excel in their respective fields.

How can institutions of higher learning adapt to more closely match women with positions in leadership?

To bridge the gender gap within leadership roles, higher educational institutions can implement significant adjustments across several key areas. Integrating leadership and entrepreneurial skills into academic programs can prepare women for higher positions by fostering strategic thinking, decision-making and effective communication. Additionally, an initiative to support women in leadership can introduce tailored courses on management theories, while workshops for women in business can support aspiring entrepreneurs and corporate leaders.

In what ways do universities support Saudi women in transitioning from higher education to employment?

PNU has implemented several successful programs that empower Saudi women both academically and professionally. The university's expansion of postgraduate and professional programs has enhanced opportunities for advanced education. The establishment of the Sarah Al Sudairy Center for Women's Studies serves as a vital resource for research and education on women's issues, housing a specialized library and a museum documenting Saudi women's development.



# Suzan Al Yahya

**CEO, Royal Institute of Traditional Arts; Former Head of Graphic Design Department, PNU**

*In what ways did the infrastructure at PNU enhance your position as both a faculty member and executive?*

The campus at PNU has excellent labs, extensive online learning resources, and comprehensive libraries filled with books and data that students need to excel. As a former faculty member and executive, this environment has been crucial in improving my skills and providing the needed tools for both teaching and leadership.

*By what means does PNU collaborate with the private sector to prepare students for the workforce?*

PNU places a strong emphasis on collaborating with the private sector. The university ensures that students are well trained across various industries, aligning their

education with market needs. This collaboration not only provides practical training but also creates job opportunities for graduates. Seeing these students succeed in the market is a testament to the effectiveness of the academic programs.

*Which role does Vision 2030 link with PNU's focus on cultural heritage and arts?*

PNU is closely aligned with Vision 2030, especially in the field of cultural heritage, arts and national identity. Vision 2030's focus on the preservation of cultural heritage and the creative economy are areas in which PNU can play an active role via its courses, research and actions. PNU provides several unique multidisciplinary programs that cover culture, heritage and museum studies. In graduate projects, PNU focuses on multidisciplinary research, making students think about how cultural practices are linked with social, economic and technological factors. This approach helps them gain comprehensive knowledge of cultural preservation and provide new approaches to the conservation of heritage in the contemporary world.

*Where do you identify a connection between PNU and the private sector in terms of graduate success?*

PNU's connection to the private sector is a key indicator of its success. Their graphic design department, for example, continuously engages students with the market, ensuring that their education aligns with real-world demands. I have seen how this approach benefits students and the economy, fully supporting the private sector.





# Case study: The WLC, established by PNU

Aligned with Vision 2030's objectives to empower women and expand their access to education, employment and leadership roles, PNU established the Women's Leadership Center (WLC) in 2022. The WLC supports Saudi women in academic and professional leadership by fostering collaboration between academia and industry, as well as developing specialized programs focused on three pillars: comprehensive skills development, experiential learning, and networking and visibility. For skills development, the WLC partners with academic institutions and industry leaders in sectors including education and health care to build leadership competencies tailored to specific fields. Programs also focus on essential soft skills, including communication, creativity and problem solving – which are vital for long-term career success. To enhance networking and visibility, the WLC hosts events such as book clubs and seminars, thereby bringing together women leaders from various backgrounds to foster mutual support and to advocate for increased female representation in leadership roles.

The nationwide Women's Leadership Development Program, QIADYA, was launched in 2022. In high demand, this is an evidence-based leadership development initiative for Saudi women. The program combines global expertise with local approaches, offering leadership coaching, interviews with successful Saudi leaders, training workshops, business simulations and virtual reality experiences.

## Impact of the WLC, 2022-24

60

female leaders were selected for the WLC from some 500 applicants



The program achieved an **88%** satisfaction rate among participants



**70%** of attendees received a promotion within six months of completing the scheme

Source: PNU

# Spotlight on PNU's innovative approach to academic achievement

PNU is positioning itself as a leader in adapting to the rapidly evolving educational landscape and disruptions in the job market, particularly through Vision 2030, advancements in generative artificial intelligence (AI) and a shift to online learning. Vision 2030 has introduced new sectors to the job market while actively encouraging women to participate in the workforce. The rise of industries such as tourism and entertainment, the increasing emphasis on technology and ambitious urban development plans for cities like Riyadh have created a pressing need for universities to align their offerings with evolving workforce demands. Recognizing this responsibility, PNU took swift action to address these changes. During 2020-23 PNU launched 14 graduate programs and 39 undergraduate programs tailored to emerging sectors. These programs include degrees in animation and filmmaking, renewable energy, financial technology, and museums and antiquities, equipping graduates with the skills needed to thrive in the new economy.

Another powerful driver of change is the immense potential of generative AI – with a market value projected to surpass \$1trn by 2032, therefore offering standout employment opportunities. PNU identified AI as a strategic focus. The university highlights the importance of diversity in AI, emphasizing the critical role women and minorities play in developing tools such as unbiased AI systems. To equip graduates for an AI-driven future, PNU has introduced bachelor's degrees in AI, along with a comprehensive AI strategy that spans teaching, research, service to communities, institutional excellence and policy development.

PNU adopted a hybrid teaching model in response to the growth of online learning accelerated by the Covid-19 pandemic. This not only enables online access to program content and materials, but also integrates AI tools into all courses.

## Number of new programs offered at PNU during 2020-23

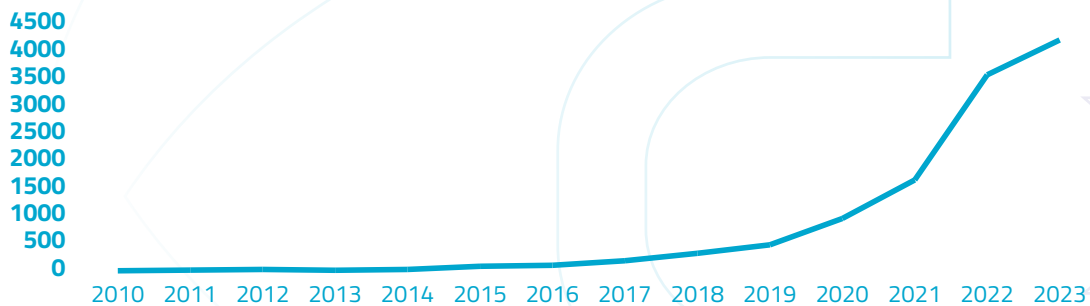
Undergraduate	39
Graduate	14

Source: PNU

This transforms traditional classrooms into spaces for interactive, instructor-guided activities; and aligns with the digital learning preferences of younger generations and with evolving educational methodologies.

PNU's innovation and adaptability has significantly enhanced its position in global academic rankings. Over the past decade the university has achieved remarkable growth in research output, increasing by more than 270%. This earned PNU a prominent spot in the 2024 Shanghai Ranking – placing it among the top-400 universities worldwide, fourth nationally and first globally among all-women universities. These achievements are reinforced by the awards received by PNU's faculty, welcoming 26 academic accolades across various fields, and female students, who have welcomed 40 awards so far. Of these awards, 30% recognize achievement in sports, 28% in scientific activities, and 10% in technical and health fields – along with 11 international awards in the 2022/23 academic year.

### Number of PNU Web of Science publications



Source: PNU

### Spotlight: PNU, AI and Students

Under its AI strategy, PNU launched initiatives on three levels: quick win, micro level and macro level. The quick-win program seeks to ensure that every PNU graduate possesses a foundational understanding of generative AI for productivity. A short online course was developed and made mandatory for all graduates. This evolved into a credited university requirement, and provides students with knowledge on AI fundamentals, applications across various fields, ethical considerations and prompt engineering techniques. At the micro level, the focus is on integrating AI tools into every course. A review was conducted to identify AI tools relevant to each course, ensuring that students are exposed to, and learn to use, AI tools relevant to their specific discipline. The macro level takes a broader approach, examining how entire academic programs should evolve to prepare students for an AI-driven workplace. Each department was tasked with forecasting the future of its field, and answering the following question: how should the program be redesigned to better equip students for a world shaped by generative AI?

# PNU's STEM education offering and female excellence in the field

With women comprising more than half of STEM students in Saudi universities, the technology, engineering and sciences job markets are well supplied with highly qualified female talent. PNU has been a pioneer in this area as the first public Saudi university to establish a women's College of Engineering, with the largest number of female students enrolled on courses related to computer and information sciences among Saudi institutions. And yet, women constitute only 35% of the tech sector in the Kingdom. To address this gap, Vision 2030 prioritizes increasing female participation in the workforce, particularly in science, technology, engineering and math (STEM). This strategy includes improving workplace environments, overcoming societal barriers and enhancing personal motivation. Universities, including PNU, play a crucial role in this mission by researching the STEM job market and equipping graduates with the skills and knowledge necessary to thrive in these industries.

## SheCodes in numbers, 2024

Number of students	336 from 22 universities
Number of projects exhibited	90 projects – including three winning projects
Private sector participants	23 entities

The College of Computer and Information Sciences at PNU is at the forefront of advancing STEM education through initiatives like SheCodes, an exhibition and competition platform that allows female students from all Saudi universities to showcase their innovative graduation projects in computing and technical fields. This promotes a competitive environment, knowledge exchange and creativity – all while addressing real-world challenges. By connecting students with employers and business incubators, SheCodes bridges the gap between academia and the job market. Since its inception in 2022, the initiative continues to evolve. The 2024 edition focused on transforming creative projects into marketable tech solutions, supporting access to opportunity.

# Spotlight on PNU's career programs and entrepreneurship

Aligned with its mission to facilitate students' transition from academia to the workforce, PNU introduced the Smooq platform. This initiative is designed to prepare students – from their admission to their graduation – with the essential skills and values required for the dynamic labor market. Using a scientific approach, the platform evaluates students' proficiency and, based on their skill level, provides tailored guidance for personal and professional development.

PNU has also created a supportive environment for innovation and entrepreneurship by addressing the key needs of students and staff. The Center for Innovation and Entrepreneurship plays a central role by offering training, support and essential resources for women aiming to establish and grow their businesses. PNU actively promotes hands-on learning and turning ideas into successful ventures. Additionally, the center supports these entrepreneurs with technical assistance, providing access to specialized training, laboratories and incubators for innovative solutions. For instance, the center's digital incubator, which focuses on supporting technical projects and start-ups, has successfully nurtured over 53 projects through its Code Lab in the past two years. This initiative fosters innovation within the university while also contributing to the broader entrepreneurial ecosystem in Saudi Arabia, aligned with Vision 2030 objectives for long-term growth.

## Smooq in numbers



**22,000+**  
registered  
students



**35**  
skills and values



**105**  
assessments



**2000+**  
personal and  
professional  
activities

Source: PNU

# PNU's advanced facilities and investment in academic achievement

## Infrastructure investment in academic achievement



**Central library**  
300,000+  
books



**Laboratories**  
250+ across  
various  
disciplines



**Health and Natural  
Sciences Research  
Center**  
Approximately  
40,000 sq meters



**Clinical Skills and  
Simulation Center**  
200+ manikins in an  
area spanning 28,000 sq  
meters

Source: PNU

PNU has made substantial investment in key facilities, consistently upgrading its campus with the latest equipment and technologies in order to keep pace with scientific and research advancement on a local, regional and global level. Such advancements have contributed to enhanced achievement in these fields, including an increase of over 200% in published research since 2019.

PNU's investment in research infrastructure extends to specialized laboratories in fields like electrical and biomedical engineering, offering students hands-on experience with cutting-edge tools in areas such as communication systems, solar energy, nanotechnology and digital design. The university's focus on emerging technologies, including biosensors and photovoltaic systems, aligns with global trends – preparing students for modern engineering challenges. The College of Computer and Information Sciences alone houses 37 labs, including six that specialize in networks, cybersecurity, robotics and data analytics.

The university's Clinical Skills and Simulation Center, a globally recognized health care education facility, spans 28,000 sq meters and provides simulation-based training for health care professionals and students. With 37 simulation rooms, five procedural labs, clinics for examinations and advanced life support units, the facility promotes critical decision-making and practical skills. Its accredited programs play a vital role in women's empowerment and scientific progress in Saudi Arabia.

# PNU's international partnerships and their wide-reaching impact

One key driver of PNU's international recognition and improved academic rankings is its proactive approach to research that addresses both local and global challenges. By fostering strategic partnerships at both the local and international levels, PNU has significantly enhanced its academic and research achievements.

On the academic front, collaboration with institutions like Swansea University have enriched PNU's offering – with examples including a master's of science in energy and innovation – and further solidified its reputation for academic excellence. In the realm of research, a partnership with the University of Tokyo led to the establishment of the first green hydrogen production plant in the Riyadh area, underscoring PNU's commitment to impactful innovation.

PNU has strengthened its research funding programs and hosts conferences and seminars each year to promote cooperation in scientific research. Noteworthy events include the Education 4.0 International Conference & Exhibition and the Third Excellence in Teaching and Learning Forum, both of which aim to modernize education and improve teaching practices. In collaboration with the Ministry of Planning, PNU's College of Languages is leading efforts to integrate the UN SDGs, including SDG 5 on gender equality, into the university's curriculum.

## Number of collaborations with universities, multinational corporations and non-profit organizations

25+

local

125+

international

Source: PNU

# Case study: Apple Developer Academy

Established in 2021 and located at PNU, the first Apple Developer Academy in the MENA region is uniquely focused on empowering women in technology and entrepreneurship. The academy offers several key programs. First, the Foundation Program is a one-month introductory course that provides trainees with foundational programming knowledge, prototyping experience and an introduction to app design using Swift. Next, the First-Year Program is a year-long intensive curriculum for selected participants designed to cultivate skills in iOS app development, project management, database administration, teamwork, communication and marketing. The next step is the Second-Year Program, which focuses on transforming participants' app development projects into viable start-up businesses.

## Apple Developer Academy in numbers, 2021-24

Number of students	1200+
Number of nationalities of students	14
Number of apps launched on the Apple Store	100+
Number of prototypes completed	700+

By hosting the academy, PNU provides a dynamic platform that seamlessly integrates technology education with entrepreneurship, fostering the next generation of female leaders. This collaboration has yielded significant outcomes since launching: over 58% of academy graduates to date have secured employment within six months, and 28% work directly in app development.







# Leila Albassam

**Professor of History of Clothing and Textiles, PNU**

**In what ways have you seen female education in the Kingdom evolve?**

The education sector for women in Saudi Arabia has changed remarkably, just in my lifetime. Fifty years ago most school teachers came from other countries and there was little female participation in education, with women primarily graduating as teachers of a variety of different academic subjects. The subject of my master's degree, for instance, centered around tradition and clothing, reflecting societal norms of the time. When I joined PNU in 1988, I advocated for the inclusion of Saudi heritage in higher education curricula. I believed it was essential to preserve our traditions while also promoting their continued relevance in modern society.

**How has increased education affected women's contributions to society?**

Education has broadened the career possibilities for women, with many now excelling in fields including heritage conservation, design and global cultural representation. This shift has not only enriched individual lives, but also strengthened Saudi Arabia's position in the international cultural arena.

**By what means has the link between academia and culture helped shape Saudi society's attitudes to heritage?**

Today, heritage education is deeply valued, with public holidays celebrating our culture. We also have publications of books and encyclopedias on Saudi history. At PNU, we launched a women's museum, for which I travelled across the country to collect artifacts. Students graduate with extensive knowledge of traditional costume design. They learn to measure, cut and create garments that merge tradition with modern fashion, and many go on to become professional fashion designers.

**What challenges remain for female higher education in Saudi Arabia?**

Although significant progress has been made, there is a pressing need to expand opportunities for women in advanced education. Many female students stop at the master's level due to a limited access to PhD programs. Expanding these opportunities would help to empower women to take on leadership roles in academia, business and beyond.

# Fatimah Al Kahtani

**CEO, REFD; PNU Alumna**

**In what ways did your time at PNU prepare you for your CEO role at REFD?**

I worked directly with the dean of the College of Education during my studies and with the dean of Health Affairs after graduation, learning time management, networking, problem-solving and leadership skills. The professional mentorship I received was invaluable. It has been eight years since graduating from PNU's College of Education and to this day, the experience continues to influence my leadership style.

**How did your education at PNU shape your perspective on women's roles within the entrepreneurial sector?**

My education provided me with an excellent academic experience and afforded me with volunteer programs that offered invaluable opportunities. We started our business to support caregivers. When I graduated, PNU assisted me with networking and gaining work experience, which encouraged my growth in leadership. They provided opportunities to work in partnerships and investment outside of the campus, helping me to enhance my skills.

**What specific examples have empowered female students at PNU?**

The university offers an ideal environ-

ment for growth, providing training, workshops, mentoring and awards. PNU has contributed significantly to my personal and professional development, guiding me and my colleagues, who were my cofounders at REFD, to win two awards for our efforts.

**How have the skills from the special education program at PNU shaped your approach to training and development?**

My training as a contractor and teacher involved supervising students in the field, an experience that the university financed for one semester. Afterwards, I continued to work with PNU in committees that were focused on research, innovation and humanities. Awards and recognition boosted my self-confidence and empowered me throughout my professional journey.

**What initiatives or changes would you like to see to support and empower women both educationally and professionally?**

I would like to see more training and workshops to bridge connections between different fields, especially in rehabilitation and medical services. There are opportunities to train providers within the work context, and PNU's 30 training programs serve as a testament to its commitment to personal, professional and academic skill development. PNU's holistic approach sets it apart from other universities; I would like to see its initiatives replicated in other Saudi institutions.



# Case study: Sarah Al-Sudairi Center for Women's Studies

The Sarah Al-Sudairi Center for Women's Studies was established in 2023 by royal decree at PNU as a pioneering initiative to support women's studies, champion the advancement of Saudi women, and enhance their representation and participation in the nation's development. The center is dedicated to highlighting the contributions and achievements of women, both historically and in the present day. Its work revolves around two main pillars: providing evidence-based recommendations to inform policies related to women, and archiving and showcasing the history of Saudi women and their contributions to national progress. These efforts are bolstered by fostering partnerships with relevant public and private sector entities.

In November 2024 the university made a significant acquisition of historical assets related to women's national heritage through the Sarah Al-Sudairi Saudi Women's Museum. These assets were obtained from Dr Linda Logan, a private US citizen who lived in the Kingdom during the 1950s. Her father, Sam Logan, had been commissioned by King Abdulaziz to establish the Al-Kharj Dairy Farms. During their time in Saudi Arabia, the family received several gifts from the royal family – which they had preserved until this time. The museum negotiated the acquisition of these historical items: these include two dresses belonging to Princess Nourah bint Abdulrahman, whom PNU is named after.



# Successful PNU alumni amid national progress towards Vision 2030

Since 2016, Saudi leadership has highlighted the untapped potential of women and underscored their empowerment as key to the success of Vision 2030. The blueprint outlined ambitious goals to increase women's participation, with numerous initiatives designed to empower women to reach their full potential and drive national development. The rapid growth in female employment reflects focused investment in women's higher education, which is now yielding considerable dividends. By integrating educated women into traditionally male-dominated and newly emerging fields, Saudi Arabia has harnessed a vast pool of talent.

PNU takes immense pride in its alumni and celebrates their significant contributions to the national economy. Having one of the highest female graduate employment rates in the Kingdom reflects PNU's commitment to preparing students to meet workforce demands, fostering sustainable relationships with the job market and providing continued support for graduates in their professional journeys.

As part of its dedication to building connections with the job market, PNU launched an initiative under the Vision 2030 slogan, "Learning for Working." This empowers colleges to innovate and develop unique models to integrate with their respective job markets. Each college, leveraging its specialized focus and understanding of its unique job market, devised tailored strategies for collaboration. These ranged from innovation journeys deeply integrated with the private sector to hybrid simulations involving industry participation, and even paradigm shifts in academic focus to align with emerging sectors.

PNU's commitment to students extends beyond graduation. The university established an Alumni Association to maintain strong connections with graduates. Meanwhile, the Alumni Portal serves as a platform for ongoing engagement, with a variety of resources and opportunities, including university news, professional development programs, invitations to major events and job opportunities. These efforts underscore PNU's dedication to supporting its alumni as they progress in their personal and professional journeys, and drive progress toward national aims.

# PNU's future direction and commitment to promoting innovation

As PNU prepares to launch its new strategic plan to guide it in the years to 2030, the university is taking a moment to reflect on its impact both nationally and globally. This evaluation focuses on PNU's contributions toward realizing the goals of Vision 2030 and explores ways to maximize its influence in the next five years.

PNU is closely examining its role in key areas, including its contribution to GDP, the effectiveness of its community service initiatives and its impact on women's empowerment – particularly how these efforts have enhanced Saudi Arabia's position in the global Gender Gap Index. Additionally, the university is assessing its alignment with the SDGs to ensure it continues to drive meaningful change.

As a result of this comprehensive analysis, innovation emerged as the cornerstone of PNU's success and future direction. Whether in teaching, learning, research or the operational framework of the university, innovation stands out as the driving force propelling PNU forward. It is this commitment to innovation that will enable PNU to amplify its impact, adapt to evolving challenges and solidify its role as a leader in education and societal transformation.

As PNU embarks into the next phase, innovation will serve as the cornerstone of its progress. With the launch of its cutting-edge AI strategy, PNU has laid the foundation for a forward-looking future – moving beyond the traditional brick-and-mortar university model and focusing on the needs of the future. The future of PNU is defined by agility, advanced technologies and ground-breaking approaches. Through innovation, PNU aims to achieve key goals, including promoting sustainability, maximizing impact and enhancing community service.

These objectives reflect PNU's unwavering commitment to Vision 2030 goals, particularly in fostering sustainable growth, driving economic diversification and empowering women to excel in the workforce through international collaboration, societal well-being, smart technologies, and heritage and cultural values.

# Remaining at the forefront of education and research

PNU is committed to advancing research through wide-ranging strategic initiatives. Among these, the Deanship of Scientific Research and Libraries plays a pivotal role in fostering a robust scientific research culture supported by a comprehensive research system and performance indicators. The university hosts three main research centers and over 17 research units, emphasizing both diverse participation and investment in state-of-the-art infrastructure and equipment.

To further enhance research engagement, the Innovation and Entrepreneurship Center offers funding programs and streamlined application processes. Access to databases, consultancy services and workshops align research with the priorities of external agencies, while strategic partnerships with entities including the Ministry of Environment and Saudi Basic Industries Corporation (SABIC) attract funding. PNU provides editorial services, including plagiarism checks and proofreading, and bolsters research awareness through media outreach and tours. The Innovation Journey program, led by the College of Computer and Information Sciences, nurtures future skills and competitiveness – supporting women's leadership and other economic goals. Furthermore, the university's initiatives in renewable energy, including partnerships to develop a clean hydrogen production system, highlight its commitment to Vision 2030 objectives – including sustainable growth, economic diversification and the empowerment of women in the workforce.





# Einas Suleiman Al Eisa

## President, PNU

Seventeen years ago, PNU was established by royal decree, bringing together a group of teacher-training colleges into one unified institution – an all-women university, led by women and dedicated to teaching women. In 2011, this young university was given a stunning campus that blends beauty, practicality and state-of-the-art facilities.

This investment was a testament to the Saudi leadership's unwavering commitment to women's education and empowerment. The transformation from separate colleges into a comprehensive university was not just an administrative shift; it was a mission embraced with dedication and passion by PNU's

faculty and staff – primarily women – who worked tirelessly to shape PNU into an institution of excellence.

Fast forward to 2016: Saudi Vision 2030 was launched, placing women's empowerment at the heart of national development. Once again, the leadership's vision for women was unmistakable. PNU seized this opportunity, solidifying its role as a leading institution for women's advancement through initiatives including the Princess Nourah bint Abdulrahman Prize for Women Excellence. This prestigious award, presented by King Salman bin Abdulaziz Al Saud, honors outstanding achievements by women across various fields.

Even before joining PNU, I, like many women, viewed it as a platform for empowerment. However, when I was given the honor of leading this university in 2019, my perspective expanded. PNU was not just a beacon for women's empowerment – it was a center of excellence in teaching and research.

To this day, PNU remains a place where young women can realize their full potential and contribute meaningfully to Saudi Arabia's economic diversification. It is where female researchers are supported and empowered to produce world-class research. It is where students, faculty and staff actively engage with the global community while preserving their national identity. From my first day at PNU, I have witnessed innovation, resilience and the relentless pursuit of progress. Every single day, I am inspired by the remarkable women who contribute to this institution.

PNU is home to multiple centers dedicated to serving and advancing Saudi women. Established in November 2017, the National Observatory for Women has earned regional recognition for its research on women's progress and contributions to the economy. The Women's Leadership Center, meanwhile, attracts annual sponsorships from leading private sector organizations to support programs designed for women. With the establishment of the Sarah Al-Sudairi Center for Women Studies by royal decree, PNU is further cementing its role as a center for women's empowerment.

PNU is more than just a university championing education for women: it is a dynamic, agile institution that rapidly adapts to the evolving landscape shaped by Vision 2030. No other university matches PNU's speed in launching programs aligned with the Kingdom's newly emerging industries. One of the highest employment rates among female graduates in Saudi universities speaks to the quality of PNU's programs, faculty and students.

Furthermore, our university's extraordinary growth in research has earned it a place in prestigious international rankings, standing shoulder to shoulder with older, more established institutions. It is these achievements that led Apple to select PNU in July 2021 as the host for its first Developer Academy in the MENA region – an all-women academy, situated in the heart of an all-women university.

As I reflect on my six-year tenure as president of PNU, I recall both moments of triumph and moments of challenge. However, through it all, one constant has remained: the extraordinary women of PNU. I am proud of them, I am humbled by them and I am profoundly grateful for the privilege of working alongside them. As I look to the future, I am more excited than ever to witness the world they will shape through their ideas, their innovations, their breakthroughs and their leadership because – if the past is any indication – the women of PNU are surely destined to achieve miracles.



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Princess Nourah bint  
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