**Republic Polytechnic (RP) accelerates AI transformation to develop future-ready learners and an AI-adept workforce**

- *Use of AI to be further embedded across RP's teaching and learning ecosystem to support national AI push*
- *RP to expand industry collaborations with leading AI and technology giants to advance AI education and workforce capabilities*

**Singapore, 8 January 2026** – Republic Polytechnic (RP) today unveiled a comprehensive AI transformation strategy that will strengthen its teaching and learning ecosystem, deepen staff capabilities, and expand industry partnerships to meet Singapore's growing demand for AI-skilled talent. The initiative will enable learners, staff and industry partners to benefit from practical, responsible, and impactful applications of AI as RP continues to advance its role in developing Singapore's future AI-ready talent.

Mr David Neo, Acting Minister for Culture, Community and Youth and Senior Minister of State for Education, graced the Launch of RP's AI Strategy, which took place on the first day of RP's Open House 2026, as Guest-of-Honour. During the event, he joined RP in an appreciation ceremony with AI Singapore, Autodesk, Microsoft, NVIDIA and ST Engineering, to commemorate their collaborations with RP. He also toured a showcase that demonstrated how such collaborations are advancing applied AI education.

**Building future-ready learners through an AI-enhanced teaching and learning ecosystem**

Through a combination of curriculum redesign, staff upskilling and the integration of applied learning technologies, RP is reshaping its teaching and learning ecosystem to ensure every learner graduates with industry-relevant AI skills. AI competencies have been progressively embedded across all diploma programmes and by Academic Year 2027, at least half of the discipline-specific modules within each diploma will incorporate applied AI skills. This gives learners hands-on experience with the same AI tools, applications and practices that are used in the future workplaces.

This approach will also extend to the Continuing Education and Training (CET) programmes at RP. AI competencies will be infused into specialist diplomas and part-time diplomas so that adult learners can keep pace with emerging workplace technologies. CET learners will be equipped to use industry-specific AI tools for productivity, analysis and decision-making, with selected programmes offering opportunities to develop or deploy AI applications relevant to their sectors. This ensures CET learners would be equipped with practical, job-ready AI capabilities that support career advancement and industry transformation.

"Our goal is to create an environment where every learner is empowered to succeed in the AI era. By bringing the use of AI into the classroom, strengthening our workforce capabilities and working closely with industry partners, we equip our learners with the confidence, judgement and skills to use and navigate new technologies. Our purpose is ultimately about giving our learners the opportunity to adapt, grow and excel in a fast-changing world," said Ms Jeanne Liew, Principal and CEO of Republic Polytechnic.

As part of this ecosystem, academic staff have also been integrating AI into curriculum design, development and delivery. In tandem, they are also working closely with industry partners to identify emerging AI tools and practices relevant to their fields. This ensures that learning

outcomes remain aligned with evolving workplace needs. AI-enabled tools are also used to support the creation of lesson plans, assessments and learning activities. By streamlining routine tasks, these tools free up time for staff to focus on higher-value activities, such as mentoring learners and facilitating deeper discussions.

In addition, assessment practices have been redesigned to reflect these changes. Learners are now evaluated not only on final outputs, but also on their thinking processes, use of AI tools and ability to work effectively alongside them. This is reinforced through the problem-based learning approach in RP, which positions AI as a collaborator and cognitive partner while strengthening learners' critical thinking, ethical reasoning and creativity. Learners are trained to evaluate the accuracy, bias and relevance of AI-generated responses, ensuring that the use of AI deepens — rather than replaces — their capacity for independent thinking.

**Strengthening industry partnerships for education, innovation and workforce development**

Alongside a collaboration with NVIDIA, RP has also signed MOUs with four other leading AI and technology companies namely AI Singapore, Autodesk, Microsoft and ST Engineering to advance AI education and workforce capabilities. This will allow RP to tap into frontier technologies such as generative AI, agentic AI, edge computing, cybersecurity automation, and AI-enabled design tools, bringing industry-grade capabilities directly into classrooms and laboratories.

Through structured training programmes, access to specialised platforms, and co-development of AI solutions, the partnerships will allow learners to benefit from hands-on experience with industry-standard tools, opportunities in applied research, and personalised learning enabled by AI. The collaborations will also support the industries by providing companies with well-trained graduates and jointly developed AI innovations.

**Developing an AI-ready workforce at RP**

Beyond the classroom, RP is also preparing its workforce to harness AI to boost productivity and enhance service delivery. All 1,200 staff will undergo AI capability development, from building proficiency in role-relevant applications to attaining advanced certifications. More than half the workforce has already attained baseline AI capability, and all staff are on track to reach this level by end-2026. These efforts ensure RP's staff are well-prepared to adopt emerging AI technologies across academic and operational functions, strengthening the institution's AI readiness.

Further details about the initiatives are provided below:

- Annex 1: Examples of AI-infused curriculum in RP
- Annex 2: Teaching and learning framework in RP
- Annex 3: Industry showcase
- Annex 4: Industry partnerships

**- END -**

**For media queries, please contact:**

**Republic Polytechnic, Office of Corporate Communications**

Tam Shu Er
+65 9793 3940
tam_shu_er@rp.edu.sg

P.Bala
+65 9365 4300
p_bala@rp.edu.sg

Grace Adam
+65 8267 2040
grace_adam@rp.edu.sg

**About Republic Polytechnic**

Established in 2002, Republic Polytechnic (RP) is Singapore's youngest polytechnic. RP offers over 40 full-time courses across diverse fields, including Applied Science, Business, Engineering, Hospitality, Infocomm, Sports and Health, and Technology for Arts, Media and Design. Through its "Becoming Greater Me" framework, RP endeavours to spark joy in learning by helping students discover their purpose and aligning their goals and passions with both academic and life pursuits.

RP adopts effective learner-centred pedagogies to equip students with a wide range of skills needed to thrive in an ever-evolving world. The polytechnic envisions its graduates as Articulate Self-Starters, Passionate Community Builders, and Purposeful Game-Changers. Additionally, RP's Academy for Continuing Education offers a comprehensive suite of lifelong learning programmes, providing graduates and adult learners with upskilling opportunities.

For more information, visit www.rp.edu.sg and follow RP on LinkedIn.

## Annex 1: Examples of AI-infused curriculum in RP

### A. Use-case examples

These AI-infused experiences are anchored in real-world industry tools and authentic workplace tasks, enabling learners to apply, create and innovate with AI across different disciplines. Based on the AI competency framework within RP, learners will build capabilities across four progressive levels — from developing foundational understanding of AI (level 1), to applying AI tools ethically and responsibly within their fields (level 2). More advanced modules will guide learners to develop AI applications aligned with industry needs (level 3), and in specialised areas, even design AI systems such as agentic AI (level 4).

| L1: Awareness | L2: Application | L3: Development | L4: Design |
|---|---|---|---|
| Develop foundational understanding of AI and related issues within disciplines or technical domains. | Use AI ethically and responsibly within disciplines or technical domains. | Develop AI tools or applications ethically and responsibly within disciplines or technical domains. | Design AI systems ethically and responsibly within disciplines or technical domains. |

Below are some selected diplomas to demonstrate how the AI-infused curriculum in RP will benefit the learners.

| **School of Engineering – Diploma in Supply Chain Management** | |
|---|---|
| **Before and after: What will be changed** | Previously, students relied on manual computations and case-based planning exercises for tasks such as route optimisation, procurement decisions, and inventory planning. With AI integrated into the curriculum, students can now leverage AI tools to analyse demand patterns, optimise inventory levels, identify the most efficient routes or even to select suppliers. |
| **Why AI is essential in supply chain today** | Supply chains are increasingly complex and volatile, demanding faster and more accurate decision-making. Companies are leveraging AI to enhance planning, detect potential disruptions early, analyse data, and improve operational efficiency. |
| **AI tools and technologies students learn** | Students will be using Machine Learning, AI Prompting Skills, AI Analytical Skills, AI–Human Comparison & Validation Skills, that will help them apply routing principles to optimise routing operations, inventory management, tender evaluation, data analysis, improving root cause analysis and problem-solving for supply chain functions. |
| **Real-world AI applications and tasks** | Students apply AI to real supply chain challenges and operations such as vehicle routing. Vehicle routing problem is a complex problem. When real-word constraints, such as time windows, real time traffic, driver breaks, vehicle capacities, sustainability goals, etc., are taken into consideration, it is challenging if not impossible for the classic optimisation method to find a good solution. AI tools will help the route planning faster, adaptive, predictive and more realistic. |

| | |
|---|---|
| **Impact on graduates** | Graduates will not only master the theories, concepts, and models of various supply chain functions but also gain hands-on experience using AI tools for these tasks. This combination of theoretical knowledge and practical AI skills equips them to operate with exceptional efficiency and a competitive edge. |
| **School of Hospitality – Diploma in Hotel & Leisure Management** | |
| **Before and after: What will be changed** | We introduced an AI-driven chatbot designed specifically for student training, simulating guest interactions to enable self-paced soft-skills development. Through immersive, scenario-based practice and personalised feedback, this solution enhances real-world readiness while giving students the flexibility to practice and improve their skills anytime anywhere. |
| **Why AI is essential in hospitality** | Face-to-face interactions remain essential in creating positive guest experiences, and AI can provide realistic training to prepare our students for such interactions. Besides training, AI also supports frontline staff by automating routine and time-consuming tasks such as handling enquiries, managing bookings, and analysing guest data. Generative AI tools such as GPT and BERT, together with no-code and low-code platforms, will help enhance workplace productivity by streamlining operations and improving decision-making. |
| **AI tools and technologies students learn** | Students learn to use the AI-powered Adaptive Customer Engagement Training System (ACETS), an in-house tool designed to prepare them for real-world hospitality operations. ACETS provides immersive, scenario-based role plays that simulate the entire reservations cycle and handling guest feedback. The system uses Natural Language Processing and Machine Learning to provide AI-generated feedback on communication, voice modulation, body language, listening, problem-solving, and application of standard operating procedures, adapting to each learner's progress.<br><br>With ACETS, students gain practical experience with AI-powered customer insights and service optimisation tools commonly used in the sector. They learn to analyse guest feedback, anticipate service needs, and make data-informed decisions to improve operational efficiency and enhance guest satisfaction. |
| **Real-world AI applications and tasks** | Students will use the AI training chatbot to practice going through the reservations cycle and capturing guests' feedback. The platform offers learners a space to independently practice their soft skills through simulated hospitality scenarios and role plays. The tool provides AI-generated feedback and assessments, helping learners build confidence and competence in handling real guest interactions. Students also use AI to analyse guest feedback, predict service demand, and develop data-informed strategies to improve service quality while integrating technology effectively into hospitality operations. |

| | |
|---|---|
| **Impact on graduates** | AI plays a key role in enhancing hospitality education by improving practical training, supporting skill development, and addressing workforce challenges. These solutions not only support the continuous development of hospitality professionals but also prepare graduates to deliver technology-enabled guest experiences while maintaining a strong human touch. Overall, AI supports the tourism sector by strengthening workforce capabilities while ensuring sustainable growth and competitiveness. |
| **School of Infocomm – Diploma in Financial Technology** | |
| **Before and after: What will be changed** | Students used to learn FinTech through hands-on technology and system development. Coding tasks were focused on functional outcomes, with limited tools to verify and enhance the robustness of codes. Students now will use AI to analyse transactions, clean and prepare data, generate, review, and test code, and support decision-making. They apply AI to identify bugs, check for security issues, improve error handling, and enhance system reliability, reflecting how FinTech professionals build efficient, secure and resilient financial systems in the sector. |
| **Why AI is essential in fintech** | FinTech deals with large volumes of data, fast transactions, and strict regulations. Manual methods are no longer enough to keep up with fraud risks, compliance checks and customer expectations. Students learn to use AI to handle these challenges. They apply AI to spot unusual transaction patterns, summarise large financial datasets, and support risk analysis. This prepares them for a FinTech environment where AI is part of everyday work. |
| **AI tools and technologies students learn** | Students use Generative AI, machine learning models, analytics tools, automation platforms, and payment application programming interface (API) in their coursework. These tools support common FinTech tasks such as analysing data, building models, and developing applications.<br><br>They also use large language models (LLMs) to generate and review codes, debug systems, write documentation, and conduct research. Students also apply machine learning for prediction, automation bots for data and process tasks, and payment APIs for building and testing digital payment systems. These are the same tools and workflows used in FinTech workplaces. |
| **Real-world AI applications and tasks** | Students apply AI to real FinTech tasks such as detecting suspicious transactions, analysing customer data, and predicting trends to generate actionable insights for decision-making. They also complete hands-on tasks such as writing scripts to trigger Anti-Money Laundering (AML) alerts, building interactive dashboards, preparing mock regulatory reports, generating and debugging code, and automating repetitive |

| | |
|---|---|
| | data tasks. These exercises allow students to practise using AI directly to solve problems and improve financial system reliability, just as professionals do in financial workplaces. |
| **Impact on graduates** | Graduates leave the diploma as job-ready FinTech professionals with deep AI skills and knowledge. They can apply AI effectively in practical tasks, using it to analyse data, enhance system performance, automate processes, and develop AI-driven solutions.<br><br>Through hands-on experience with predictive modelling, automation, coding, and compliance tasks, students are prepared to contribute in roles such as compliance analyst, digital transformation specialist, financial crime compliance executive, or application developer. They can improve system reliability, optimise workflows, and integrate AI directly into innovative financial solutions. |
| **School of Technology for Arts, Media and Design – Diploma in Digital Content Creation** | |
| **Before and after: What will be changed** | Previously, students focused on manual content creation workflows using traditional tools for storyboarding, asset creation, iterative editing, and post-production tasks. While these tools have been useful for professional practice, they required extensive time commitment.<br><br>With AI infusion, students now integrate AI-powered tools throughout their creative process—from initial concept development with ChatGPT to visual asset generation with Adobe Firefly, Photoshop's generative features and After Effects for motion graphics and compositing. This integration allows students to accelerate pre-production, experiment more freely with creative ideas, and focus their energy on storytelling and artistic decisions rather than time-consuming technical tasks. Students maintain full creative control while leveraging AI to enhance their efficiency and creative possibilities. |
| **Why AI is essential in digital content** | The digital content industry is rapidly adopting AI to enhance creative workflows, reduce production time, and enable creators to focus on high-value storytelling rather than repetitive technical tasks. From independent content creators to major production studios, professionals are increasingly expected to leverage AI tools as part of their standard toolkit while maintaining creative vision and quality standards.<br><br>Modern content creators must understand not only how to use AI tools effectively but also when to apply them appropriately and how to maintain creative authenticity. Employers seek graduates who can navigate AI-enhanced workflows efficiently, understand the ethical implications of AI-generated content, and make informed decisions about integrating AI into their creative process. This makes AI literacy as essential as technical proficiency in traditional production tools. |

| | |
|---|---|
| **AI tools and technologies students learn** | Students work with professional-grade tools that mirror current industry workflows. The Adobe Creative Suite—comprising Photoshop, Premiere Pro, and After Effects—remains the core platform, now augmented by AI capabilities such as Adobe Firefly, which integrates tools like Nano Banana and Veo for generative imaging and content-aware editing. Students also gain hands-on experience with DaVinci Resolve, learning both its powerful colour grading capabilities and AI-assisted features for post-production efficiency.<br><br>For creative development and ideation, students use ChatGPT to brainstorm concepts, refine scripts, and explore narrative possibilities. They leverage text-based prompts in ChatGPT to create images that support storyboard visualisation. Besides learning to prompt AI tools effectively, students evaluate AI-generated outputs critically and integrate these capabilities seamlessly into professional workflows. |
| **Real-world AI applications and tasks** | Students apply AI throughout authentic production workflows that mirror industry practice. In pre-production, they use ChatGPT to develop and refine story concepts, generate script variations, and solve creative challenges. When developing visual direction, they employ Adobe Firefly and Photoshop's generative tools to quickly create storyboard frames, generate background mattes for visual effects, and produce placeholder assets to better visualise their creative vision before investing significant production time.<br><br>During post-production, students leverage AI-enhanced features in DaVinci Resolve for efficient colour correction, audio cleanup, and finishing work. For documentary and interview-based projects, students use AI to transcribe interviews, then feed these transcriptions back into AI tools to identify key moments and suggest paper edit starting points—dramatically accelerating the editing process.<br><br>Importantly, students learn to maintain quality control—knowing when AI outputs meet professional standards, when they need refinement, and when traditional techniques are more appropriate. This hands-on experience prepares them for real production environments where speed and quality must coexist. |
| **Impact on graduates** | Graduates are equipped to work efficiently in modern content creation environments where AI tools are standard practice. They understand how to leverage AI to accelerate technical processes—freeing up time to focus on creative storytelling, audience engagement, and artistic refinement. This productivity advantage allows them to take on more ambitious projects and deliver professional-quality work on tighter timelines. |

| | |
|---|---|
| | Beyond technical proficiency, graduates develop critical thinking skills around AI use in creative work. They can evaluate when AI enhances their creative vision versus when it constrains it, maintain quality control over AI-generated elements, and navigate ethical considerations around authenticity and attribution. This balanced perspective equips graduates for evolving roles such as AI-assisted content strategists, virtual-production producers, XR/AR experience designers, synthetic-media artists, data-driven video editors, motion designers, social-media and creator-economy producers, and content-ops workflow engineers—professionals who blend creative artistry with technological fluency to tell compelling stories across intelligent, multi-platform ecosystems. |

**Annex 2: Teaching and learning framework in RP**

- Academic staff *teach about AI* by designing learning outcomes aligned with RP AI competency levels. This involves embedding applied and ethical AI use within the curriculum rather than treating AI as a stand-alone topic. They work closely with industry partners to identify emerging AI skills and practices relevant to their domains. Through this process, staff can also help to keep the curriculum responsive and future-ready.

- Academic staff *teach with AI* through active, inquiry-based approaches such as problem-based learning. They use AI as a co-teaching partner to model responsible use, stimulate curiosity, and support learners in evaluating AI outputs critically. AI-enabled tools can provide real-time feedback and personalised learning support through contextualised chatbots, while staff continue to anchor human facilitation and encourage student collaboration. This combination of AI-supported scaffolding and lecturer-led reflection makes learning more adaptive and student-centred.

Academic staff design assessment tasks that reflect how AI is used in learning and professional practice, supported by lesson activities that prepare learners to engage appropriately with AI tools. Learners are assessed not only on their final products but also on their decision-making, process evidence, and ability to use AI responsibly and ethically. Such assessment practices uphold academic integrity and mirror how professionals collaborate with AI in the workplace.

- Beyond the classroom, the framework also emphasises *teaching beyond AI* by cultivating an ecosystem that encourages authentic, practice-based learning. Schools are encouraged to design AI-related projects, innovation challenges, and identify external competitions where learners apply AI to real-world problems. These experiences deepen interdisciplinary learning, recognise emerging student talent and strengthen graduates' readiness for an AI-enabled workplace.

**Annex 3: About the industry showcase**

These four showcases demonstrate how RP's partnerships with Microsoft, NVIDIA, ST Engineering, and Autodesk are exemplifying our commitment to embed AI deeply and responsibly across education, research, and industry collaboration by:

- Bringing world-class AI technologies into authentic learning environments.
- Helping learners build practical skills in areas such as generative design, cybersecurity, edge AI, and personalised learning.
- Accelerating industry adoption by providing shared testbeds, consultancy, and industry-ready graduates.
- Supporting Singapore's national agenda to build an AI-ready workforce.

| Company | About the showcase | Educational / Industry Value |
|---|---|---|
| Autodesk | Autodesk Fusion for Design AI: Reimagining product innovation through generative design<br><br>Autodesk Fusion's Generative Design capabilities allow learners to explore AI-optimised design solutions for engineering prototypes. The showcase focuses on drone frame development, where AI generates multiple design variations based on performance goals, materials, and engineering constraints.<br><br>A student presenter from RP and an Autodesk specialist will:<br>• Walk through the setup of a Generative Design study in Fusion.<br>• Display AI-generated design iterations on screen.<br>• Present 3D-printed drone frame prototypes produced by students. | • Immerses learners in AI-enabled engineering workflows used in Industry 4.0.<br>• Accelerates product development cycles, enabling more hands-on experimentation in RP modules.<br>• Cultivates design optimisation skills grounded in sustainability, efficiency, and manufacturability.<br>• Demonstrates the role of AI in advanced manufacturing and design automation.<br>• Strengthens the talent pipeline for Singapore's engineering sector. |
| Microsoft | Flexi Pathway Explorer: Empowering personalised learning pathways with generative AI<br><br>The Flexi Pathway Explorer is RP's first AI-powered academic planning platform, co-developed with Microsoft. It helps prospective and current students visualise their academic journey and receive personalised recommendations based on their interests, academic results, and career aspirations.<br><br>Using Azure AI Search and Azure OpenAI, the tool dynamically generates | • Equips students with greater agency and clarity in academic planning.<br>• Uses AI to demystify course selection and align learning with workforce needs.<br>• Helps produce graduates who chart clearer, more intentional learning pathways aligned with sectoral trends.<br>• Showcases scalable, student-centric AI adoption for the wider education landscape. |

| Company | About the showcase | Educational / Industry Value |
|---|---|---|
| | suggested diplomas, majors, electives, and career trajectories.<br><br>Two student presenters from RP will demonstrate:<br>• How current students use the tool to design flexible, goal-aligned study plans and explore alternative pathway options.<br>• How prospective students can input interests and aspirations to receive tailored diploma and career recommendations on the spot.<br>• Real-time recalibration of pathways when users change inputs such as career interest or academic strengths. | |
| NVIDIA | <u>NVIDIA Inference Microservices (NIMs): Multimodal RAG for video intelligence and conversational search</u><br><br>This showcase features NVIDIA NIMs (NVIDIA Inference Microservices), which enable advanced video intelligence by combining real-time edge detection with deep video and audio analysis using cloud-based APIs. The system transforms recorded media into structured, searchable data through multimodal Retrieval-Augmented Generation (RAG), allowing users to interact conversationally with video content and extract actionable insights.<br><br>RP and NVIDIA presenters will demonstrate how NVIDIA NIMs support both industry and education use cases:<br>• Logistics (Industry use case): A deployed solution developed with CWT and RP, where a computer vision system automatically detects container truck arrivals and verifies correct positioning at loading zones. This improves operational efficiency, safety, and turnaround time through automated visual inspection and real-time monitoring.<br>• Teaching & Learning (Education use case: An RP proof-of-concept project that enables students and lecturers to | • Gives learners hands-on experience with edge AI, accelerated computing, and VLMs—key capabilities in robotics, manufacturing, and smart systems.<br>• Strengthens RP's curriculum in AI engineering, benefiting programmes across engineering, ICT, and applied science.<br>• Demonstrates how companies can adopt edge AI for operational efficiency and safety.<br>• Supported by NVIDIA Deep Learning Institute (DLI) courses delivered by NVIDIA-certified RP trainers, providing industry-recognised certification. |

| Company | About the showcase | Educational / Industry Value |
|---|---|---|
| | analyse recorded team presentations. Using conversational search, users can query videos to extract key moments, themes, and feedback insights—supporting reflective learning, peer evaluation, and instructional review. | |
| ST Engineering | <u>Agentic AI security operations centre: Next-generation cybersecurity training with autonomous AI agents</u><br><br>The Agentic AI security operations centre (SOC) platform, developed by ST Engineering, showcases how AI can autonomously triage alerts, investigate threats, and provide real-time insights that traditionally require human analysts. The platform illustrates the future of cyber-defence where AI agents handle large volumes of security data.<br><br>Presenters from RP and ST Engineering will demonstrate:<br>• Automated threat investigation workflows triggered by a simulated cyber incident.<br>• How the platform correlates logs, conducts false-positive analysis, and issues natural-language summaries.<br>• How AI agents prioritise alerts and recommend rapid response actions. | • Provides an authentic training ground for learners to learn AI-driven cyber forensics, threat analysis, and SOC automation.<br>• Supports curriculum in Agentic AI for Cybersecurity, Securing AI, and Red Teaming.<br>• Enhances staff expertise through applied R&D with ST Engineering.<br>• Demonstrates how autonomous SOC technologies address manpower constraints in cybersecurity.<br>• Builds national capability in AI-enhanced cyber defence, aligned with Singapore's digital security needs. |

**Annex 4: About the industry partnerships**

RP has established key collaborations with leading global technology organisations to accelerate the adoption of artificial intelligence in teaching, learning, research, and workforce development. These partnerships ensure that RP's learners, educators, and industry partners benefit from frontier technologies and real-world applications, strengthening Singapore's wider education and skills ecosystem.

These collaborations collectively:

- Bring cutting-edge AI tools and industry practices directly into the classroom.
- Strengthen educator capabilities through structured training and global expertise.
- Connect learners with authentic, applied learning opportunities that mirror workplace challenges.
- Enable RP to contribute to national AI initiatives, talent development, and sector-wide capability building.

The partnerships will allow RP to better support the workforce needs as well as Singapore's broader transformation across education and industry.

| Company | Scope | Impact |
|---|---|---|
| AI Singapore | Building a strong national AI talent pipeline<br><br>RP and AI Singapore (AISG) are jointly supporting national efforts to raise AI literacy and grow the next generation of AI talent through:<br>• AI bootcamps for selected MOE secondary schools to increase awareness and participation in the National Olympiad in AI (NOAI).<br>• Training Singapore and ASEAN educators through the *AI for Good (Educator)* programme, with RP staff supported to become certified instructors. | • Strengthens national capacity by training teachers and learners to engage meaningfully with AI.<br>• Creates an early talent pipeline that feeds into the polytechnic and tertiary AI programmes.<br>• Positions RP as a contributor to national and regional AI uplift, not simply a beneficiary. |
| Autodesk | Advancing AI-enhanced design and engineering education<br><br>Autodesk and RP are collaborating to enrich engineering and design education through:<br>• Integration of AI-powered tools in Autodesk platforms such as Fusion 360.<br>• Co-organised training programmes, competitions, and design innovation activities.<br>• Support for workforce and industry needs in advanced manufacturing and Industry 4.0. | • Learners gain practical experience with AI-driven modelling, simulation, and generative design tools now widely used in engineering and manufacturing.<br>• Competitions and hands-on projects encourage creative problem-solving and prepare graduates for roles in smart factories, automation, and product innovation.<br>• Supports Singapore's push to grow a digitally skilled engineering workforce. |

| Company | Scope | Impact |
|---|---|---|
| Microsoft | <u>Empowering students and staff as skilled AI users and creators</u><br><br>Microsoft is supporting RP in building a digitally confident community by enabling students, and staff to use AI for learning, productivity, and innovation. This includes the integration of Microsoft 365 Copilot and the Power Platform into teaching, curriculum design, and operational workflows. | • Structured upskilling programmes equip staff and learners with practical AI competencies.<br>• Joint development of AI-powered tools—such as the *Flexi Pathway Explorer*, which uses Azure AI Search and Azure OpenAI—demonstrates how generative AI can personalise academic planning.<br>• Strengthens digital literacy across the polytechnic sector and helps academic staff model responsible AI use for future cohorts. |
| NVIDIA | <u>Advancing deep learning skills and applied AI innovation</u><br><br>RP is an official NVIDIA Deep Learning Institute (DLI) partner, enabling RP-certified trainers to deliver DLI training and issue industry-recognised certification. | • Adult learners gain hands-on experience in accelerated computing, deep learning, and data science.<br>• Enhances IHL-industry collaboration by translating advanced models and tools into practical projects and upskilling pathways. |
| ST Engineering | <u>Strengthening AI for cybersecurity</u><br><br>RP and ST Engineering are co-developing the RP–ST Engineering AI for Cybersecurity Innovation Centre, which deepens capabilities in emerging cybersecurity fields such as:<br>• Agentic AI for Cybersecurity<br>• Securing AI systems<br>• Agentic AI Red Teaming | • Learners will work with industry experts on workshops, learning journeys, and final-year projects in frontier cybersecurity domains.<br>• Staff will engage in applied R&D to develop new methods for detecting threats, stress-testing AI systems, and improving cyber resilience.<br>• Builds national capacity in AI-enabled security—an essential foundation for trusted digital infrastructure in education and beyond. |