

WHAT ARE WE LOOKING FOR?

SCHOOL OF ENGINEERING (SEG)

- Eager to make things happen and turn potential ideas into reality?
- At SEG, you will learn to combine LOGIC and IMAGINATION to become a resourceful PROBLEM-SOLVER who can tackle real-world problems. Let's find innovative solutions to change the way we live!

Current Course Title	Demonstrates Passion or Interest in:	Portfolio (What goes into the portfolio)	Interview (Estimated duration and possible topics/questions covered)
Aerospace Engineering	<ul style="list-style-type: none"> Aviation Aerospace Drones Aeromodelling Mathematics Physics Technical skills involving material fabrication (metal, woodwork, plastic, etc.) 	<ul style="list-style-type: none"> Awards, testimonials, and certificates Engineering/design projects and/or competitions related to the field of study CCA records, including any evidence of leadership & team skills and/or involvement in service-learning programmes Participation in aviation related CCAs such as Air Scouts, National Cadet Corps (Air), and Singapore Youth Flying Club Learning Journeys/Visits to aviation companies or events (e.g. Aviation Open House and Air Show) Relevant ApLMs* Hobbies that validate interest in the field of study 	<ul style="list-style-type: none"> Duration: 10 - 15 minutes Knowledge and interest about the field of study or industry Future plans and the relevance of the course Past experiences and achievements that demonstrate your interest in the course
Aviation Management	<ul style="list-style-type: none"> Airport operations Air traffic management Airline operations Flight operations Passenger services Airport planning 	<ul style="list-style-type: none"> Certificates of achievement/awards, projects, and competitions related to aviation Record of Values-In-Action (VIA) activities CCA records, including any evidence of leadership & team skills and/or involvement in service-learning programmes 	<ul style="list-style-type: none"> Duration: 10 - 15 minutes Knowledge and interest about the field of study or industry Future plans and the relevance of the course

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	<ul style="list-style-type: none"> • Airport management • Aviation safety • Ground operations 	<ul style="list-style-type: none"> • Evidence that demonstrates interest in the field of study, such as hobbies, participations in ApLMs as well as Learning Journeys • Career aspirations 	<ul style="list-style-type: none"> • Past experiences that demonstrate your interest and ability for the course, and what you have learnt from these experiences • Why did you choose this diploma?
Business Process & Engineering Management	<ul style="list-style-type: none"> • Business process & operation management • Process efficiency, productivity optimisation, and improvements • Resource, quality, and project management • Process and workflow simulation • Making a difference in designing safe and human-friendly work environments • 3D printing applications • Broad spectrum of industries 	<ul style="list-style-type: none"> • CCA records • Relevant documents to show participation in activities related to management of business processes, operations, resources, logistics, and events through CCA, VIA, ApLMs* or Learning Journey • Any volunteer work or achievement outside of school • Awards, testimonials, and certificates 	<ul style="list-style-type: none"> • Duration: 10 - 15 minutes • Why did you choose this diploma? • What kind of industry and career are you interested in? • How is your aspiration related to this diploma? • CCA roles • Highlight activities that you organised, the challenges you faced and how you overcame them • Examples of how you improve the way things are done
Electrical & Electronic Engineering with majors in: <ul style="list-style-type: none"> ◦ Communications ◦ Microelectronics 	<ul style="list-style-type: none"> • Drones • Internet of Things (IoT) • Embedded systems • Robotics 	<ul style="list-style-type: none"> • Awards, testimonials, and certificates • Relevant documents to show participation in areas of interest • Any involvement in volunteering work or service-learning programme 	<ul style="list-style-type: none"> • Duration: 10 - 15 minutes • What motivated you to apply for this diploma? • How did you get to know about this industry?

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	<ul style="list-style-type: none"> • Augmented reality and virtual reality • Semiconductor • Integrated circuit (IC) fabrication • Data storage and memory • Communication skills 	<ul style="list-style-type: none"> • Relevant ApLMs • Hobbies that validate interest in the field of study • CCA records 	<ul style="list-style-type: none"> • Which major (communications or microelectronics) interests you the most? • CCA roles • Past experiences and achievements that demonstrate your interests in the course • Future plans and the relevance of the course
<p>Engineering</p> <p>with majors in:</p> <ul style="list-style-type: none"> ◦ Innovation & Design ◦ Project Management ◦ Sustainable Technology 	<ul style="list-style-type: none"> • Product Design • Computer Aided Design • Design thinking • 3D Printing & Scanning • Electronics Prototyping & Mechatronics • Project Management • Operations Planning • Green Building Technologies • Working with people • Communication skills • Broad spectrum 	<ul style="list-style-type: none"> • Relevant documents to show participation in activities or competitions related to product design and prototyping/hackathons/operation or resources management/built environment/sustainability • Any volunteer work or achievement outside of school • CCA records • Awards, testimonials, and certificates 	<ul style="list-style-type: none"> • Duration: 10 - 15 minutes • Why did you choose this diploma? • CCA roles • How did you get to know about this industry? • Which aspects of the industry are you interested in? • Highlight activities that you organised, the challenges you faced and how you overcame them • Past experiences and achievements that demonstrate interest in the course

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Mobility & Robotics Systems	<ul style="list-style-type: none"> • Robotics systems • Automation systems • Intelligent mobility systems such as the mass rapid transit system, unmanned aircraft, and autonomous mobile robots • Public land transport systems such as rail operations management and maintenance, and bus fleet management • Emerging vehicular technologies such as electric vehicle and autonomous vehicle • Working with people • Team player • Communication skills 	<ul style="list-style-type: none"> • Relevant documents to show participation in robotics/automations/vehicular/land transport related activities or competitions • Any volunteer work or achievement outside of school • CCA records • Awards, testimonials, and certificates 	<ul style="list-style-type: none"> • Duration: 10 - 15 minutes • Why did you choose this diploma? • How did you get to know about this industry? • Which aspects of the industry are you interested in? • CCA roles • Highlight activities that you organised, the challenges you faced and how you overcame them
Supply Chain Management	<ul style="list-style-type: none"> • Product management • Inventory management • Transport management • Technology application in supply chain and logistics operations • Process improvement and optimisation 	<ul style="list-style-type: none"> • CCA records • Relevant documents to show participation in supply chain/logistics related activities or competitions • Any volunteer work or achievement outside of school • Awards, testimonials, and certificates 	<ul style="list-style-type: none"> • Duration: 10 - 15 minutes • Why did you choose this diploma? • How did you get to know about this industry? • Which aspects of the industry are you interested in? • CCA roles

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	<ul style="list-style-type: none"> Working with people Team player Communication skills 		<ul style="list-style-type: none"> Highlight activities that you organised, the challenges you faced and how you overcame them
Sustainable Built Environment	<ul style="list-style-type: none"> Built environment industry 3D modelling for buildings/building information modelling Sustainable/green building design Smart facilities management Working with people Communication skills 	<ul style="list-style-type: none"> Relevant documents to show participation in built environment/sustainability related activities or competitions Any volunteer work or achievement outside of school CCA records Awards, testimonials, and certificates 	<ul style="list-style-type: none"> Duration: 10 - 15 minutes Why did you choose this diploma? How did you get to know about this industry? Which aspects of the industry are you interested in? CCA roles Highlight activities that you organised, the challenges you faced and how you overcame them

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Common Engineering Programme	<ul style="list-style-type: none"> At least one passion or interest stated under any of the SEG courses 	<ul style="list-style-type: none"> Relevant documents to show participation in Engineering-related ApLMs* Relevant documents to show participation in activities and/or competitions related to Engineering, Innovation & Design, Project Management, Sustainable Technology or Management of Business Processes Learning Journeys or visits to engineering-related companies or events CCA records, including any evidence of leadership & team skills and/or involvement in volunteering or service-learning programmes Awards, certificates and/or testimonials 	<ul style="list-style-type: none"> Duration: 10 - 15 minutes Why did you choose this course? Share your past experiences and/or achievements related to engineering What is your aspiration upon completing an engineering course?

*Applied Learning Modules (ApLMs) are conducted in the same way as all our regular diplomas. The programme helps secondary school students make informed decisions about education and career plans after their graduations.

For more information, visit <https://www.rp.edu.sg/teachers/APLMS>