Frequently asked Questions

Question	Answer
What time does the competition start	Registration will open from 7.45am and we want to start proceedings from 8.30am.
Are there any videos we can watch of previous competitions to help get us ideas?	There is a lot of online material that can be used to prepare in advance. Please refer to the following two online resources in particular: • **Video of the SAICE-WC Bridge Building Competition 2021** • **Bridge Building theory presentation**
Are there prizes for the competition?	Yes, the first, second and third placed teams will receive R2,400, R2,000 and R1,600 respectively. To be shared between the teacher and the three learners equally.
How are the scores calculated?	The scores are calculated by the ratio of mass held by the bridge divided by the mass of the bridge with an aesthetic score added. The detailed formula is in the Bridge building guidelines.
When do the models need to be ready?	Models built remotely will need to be ready for collection by 10am on the morning of Thursday 05 May 2022. They will be collected by SAICE members and brought to the central venue for the loading on Saturday morning. Models built at the venue would need to be complete by 1pm on 07 May 2022.
When is the bridge breaking?	The bridge breaking will be from 2.30pm on Saturday 07 May 2022
Can I attend the bridge breaking?	Yes, pending any changes to COVID lock-down requirements. Please note that the bridge breaking will be live streamed on **Facebook** so you can remain up to date with the results if you built your model remotely and cannot attend the event.
Will I get a certificate of attendance?	Yes, every team member of teams who submit a completed bridge will receive a digital certificate of attendance. We have introduced a roll of honour whereby if you achieve a ratio of mass held to mass of bridge greater than a certain threshold, then your team will be added to the roll of honour for the competition.
What are the thresholds for the roll of honour?	Bronze: >1:250 Silver: >1:500 Gold: > 1:750 Platinum: > 1:1000 These ratios are for a span of 800mm. A correction factor will be applied for spans larger or smaller than this.
Can others help our team make the model?	The rules state that the team of learners must build the bridge themselves, however part of the learning process is to be mentored by others so we would encourage you to seek the advice and input

	of others, especially your teachers and friends ahead of the competition to try and get to the best possible design.
Will there be a national competition later this year?	The national competition is provisionally earmarked for mid-August 2022. The final dates will be communicated to the winning team.
Will there be an online bridge building competition too?	We had not planned on running the virtual bridge building competition this year, but if there is enough demand we could revise that decision.
Who will load the bridges if we cant be present?	We would prefer for learners to load their own bridges, but if a team cannot be present for the breaking then SAICE volunteers will carefully load the bridges on your behalf.
What is the maximum load that the rig can support?	We have set the maximum load at 320kg. Thus, it is in your interest to ensure that your bridge design is as efficient as possible.
Will the bridge breaking be live-streamed?	Yes, it will be live-streamed on Facebook. The channel will be **https://fb.me/e/I9H1Gf0f**
Can we get more wood?	The kits are limited to 25 timber struts, with a spare strut. In person teams will be able to swop struts if they are unhappy with the timber. You need to be economical in your choice of how to use the available struts. Economy of materials is an important part of engineering and you will need to plan your bridge carefully.
Can we get more glue?	You have received a lot of glue and this should be more than sufficient to build four bridges per kit. There will be more glue available on site.
I wont be able to watch the live stream. Will the event be recorded?	We have a videographer who will capture the event and process it into a 30-minute film. They will use slow motion replay to capture how the bridges break which we are really excited about as this will provide a much better understanding of the breaking mechanism so we can all learn from it!
What is the durability of the glue issued to us?	Cyanoacrylate (Alcolin Filler or superglue) has a is a very strong and quick-setting glue ideal for rapidly assembling the bridges. It is however brittle and is susceptable to both moisture and if the crystal structure is poor the bond will not be as strong. Epoxy takes much longer to set, but is ultimately a much stronger and more durable glue.
Will communications be issued to learners	All communications are issued to teachers who are responsible for distributing information to the learners.
Can we share media of learners building their bridges	Yes, please do share videos or images of your teams building bridges and with the completed bridge. These images will be shared in the competition video and will make the competition far more relatable to future learners considering taking part.
Will our models be returned to us?	SAICE-WC will not be returning models to learners. Should you wish your model to be retained for forensic review we would be happy to set it aside, but you will be responsible for letting us know and collecting the model from Zutari in Century City. Models not collected before close of business on 20 August will be disposed of.
What can we do between our bridge being built and the bridge breaking?	The venue, Zutari, is on the edge of the Inhaka Island wetland. We would strongly encourage learners to get some fresh air and

	exercise and may even have set up a scavenger hunt with prizes for teams. It is also possible that Zutari will take learners on a tour of the 5-star green building and learners can experience the VR room.
Will we be fed?	Yes, the event will be catered for with snacks available for learners from 10am along with lunch packs from 1pm. We will confirm any specific dietary requirements ahead of the event.
What happens to the bridges once they have been broken	Understanding the waste cycle is a critical part of circular engineering. Various recycling options have been investigated, but due to the small size of the timber members it is proposed instead to incinerate them. For this purpose a fire will be made available at the end of the competition for learners to contribute their bridges too.

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