

Fabrication of small bridge models under given conditions

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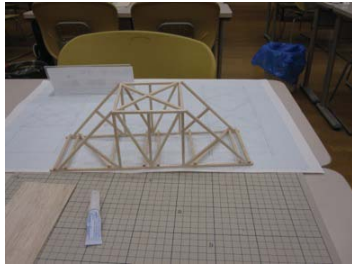
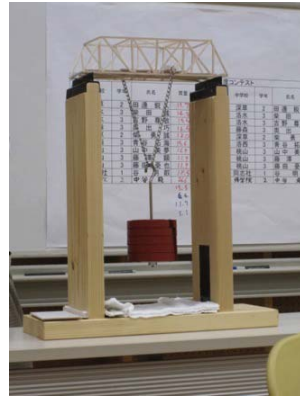


image photo



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Project Schedule

Day 1	AM	
	PM	Planning (Prepare 2 models in each group)
Day 2	AM	Model 2 small bridges as a case study.
	PM	Model 2 small bridges as a case study. Select 1 model.
Day 3	AM	Presentation (1 model in each group)
	PM	Model 1 bridge model for contest.
Day 4	AM	Model 1 bridge model for contest.
	PM	Model 1 bridge model for contest.
Day 5	AM	Presentation (Contest)
	PM	

We appreciate if tour is planned.

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Conditions

Safety : can tolerate for one minute over the load of 30 kg and bend 50 mm or less

Beautifulness of the model

Procedures

1. Each group (2 or 3, max 5 students) draws two plans for their imaging bridges.
Through discussion and pre-test using small-size models, they decide the final plan.
Each group makes their presentation on the design concept of their final plan.
2. Each group begins to fabricate a bridge model using given materials under restricted condition.
After fabrication, load carrying capacity of each bridge model and also its design beautifulness are verified.

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Requirements for students

10+10 2nd or 3rd-year undergrad students
who has knowledge or interest in the structure of bridges

Preparation

Big room with drafters & desks.
Items for modeling (balsawood, bonds, cutters, ...), weight, ...

Planning Period

Early August

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