

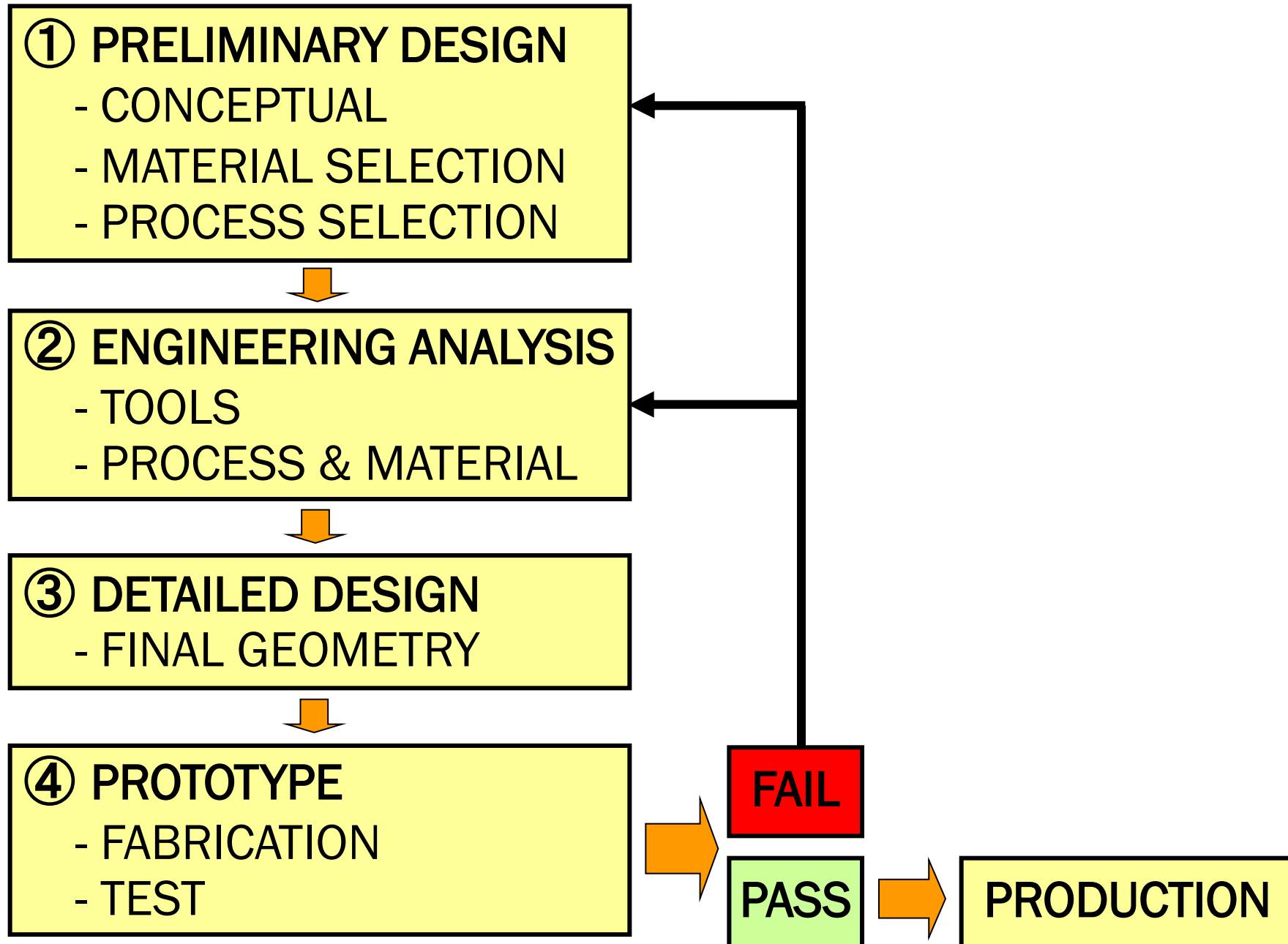
**พลาสติกอะไร
ตรงใจอุตสาหกรรมยานยนต์ในอนาคต**

เก่งกาจ สี่หนาท

Purchasing Engineering / Manager

**Toyota Motor Asia Pacific
Engineering & Manufacturing**

DESIGN ENGINEERING PROCESS

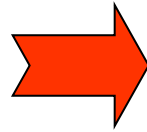


STEEL BECOME PLASTIC

NO.	PART
①	FUEL FILLER PIPE
②	FUEL TANK
③	OIL STRAINER
④	BACK DOOR TAILGATE
⑤	COVER ENGINE UNDER
⑥	QUARTER PILLAR (PIANO BACK)

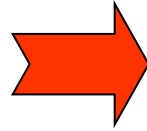
KEY POINT

① COST



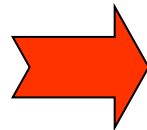
- REPLACEMENT
- WEIGHT
- PRODUCT STRUCTURE
- LOCALIZATION , ETC.

② MANUFACTURING



- PROCESS
- TOOL , ETC.

③ PERFORMANCE



- TEST ITEMS.