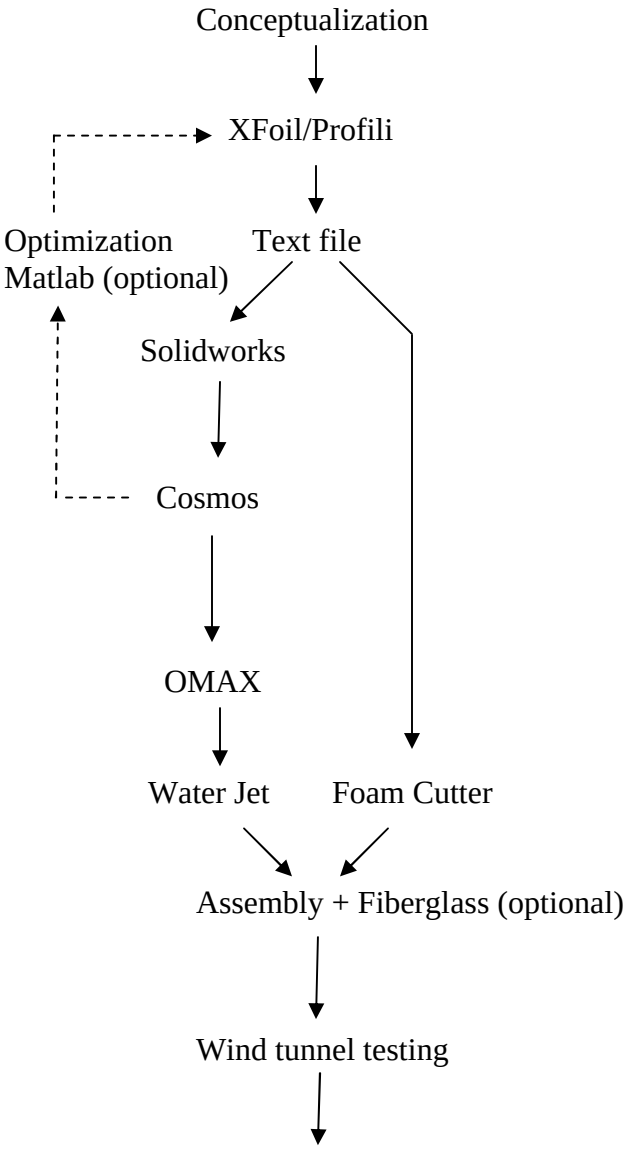
Design Flow Chart



Deliverables Checklist

☐ (A) **Hand Sketch**
Due: 6 Jan, 1p.m.

☐ (B) **2-D Airfoil Section Drawing/Analysis** (2pg)
Due: 11 Jan, 1p.m.

☐ (C) **Initial 3D CAD model of Assembly** (2pg)
Due: 13 Jan, 1p.m.

☐ (D) **Final 3D CAD model + FEA analysis + Airfoil Analysis** (4pg)
Due: 18 Jan, 1p.m.

CAM file

Foam wing, struts

☐ (E) **Completed Assembly** + **Manufacturing report** (1pg)
Due: 20 Jan, 1p.m.

☐ (F) **Testing, Validation & Cost Estimation report** (2pg)
Due: 25 Jan, 1p.m.

☐ (G) **CDR Slide Package** + **Reflective Memo**
Due: 27 Jan, 1.p.m

Software Requirements:		Xfoil/Profili (2D airfoil design/analysis) Solidworks (CAD) Cosmosworks (FEA) OMAX (CAM)
Hardware Requirements:		Waterjet (OMAX files) Foam cutter (txt files)
Materials:	Qty (24)	20”x20”x 1/8” thick plate (Aluminum)
	(24)	20”x10”x ¼” thick plate (Aluminum)
	(24)	0.5” thick, round hollow rod (Aluminum)
	(12)	Blue-foam (2”x 20”x 40” sheets)
	(x)	Fiberglassing material
	(x)	Hardware (bolts, etc)