## (KEY CONCEPT) [C-1-3] NACA 4 digit airfoil generator (NACA 2412 AIRFOIL) http://airfoiltools.com Max Camber (%) First digit. 0 to 9.5% 2 Dat file Max camber position (%) Second digit. 0 to 90% 40 NACA 2412 Airfoil M=2.0% P=40.0% T=12.0 1.000084 0.001257 Third & fourth digit. 1 to 40% Thickness (%) 12 0.999106 0.001461 ber of points 20 to 200 0.996177 0.002070 100 0.991307 0.003077 Cosine spacing Cosine or linear spacing 0.984515 0.004469 0.975825 0.006231 Close Trailing edge Open or closed TE 0.965269 0.008342 0.952888 0.010778 Plot 0.938727 0.013512 NACA 5-Digit Series: NACA X XX XX NACA 4-Digit Series: NACA X X XX ① One digit describing maximum camber (in % of 1.5, gives the lift chord). coefficient in 1/10. 2 Two digits, when divided by 2, describe the ② One digit describing the distance to the maximum distance to the maximum camber location measured camber location measured from the leading edge (in from the leading edge in 1/10 of chord. $\times 10\%$ of chord). 3 Two digits describing maximum thickness of the 3 Two digits describing the maximum thickness of the airfoil in % of chord. airfoil (in % of chord). NACA conventional airfoils (source: airfoiltools.com)

