IUPAC Rules for Naming Alkenes

I. Use IUPAC Rules for Naming Alkanes as starting point.

II. Unbranched and branched chain alkenes

- Identify the longest chain of carbon atoms that contains the double bond.
- Name the longest chain as an alkane, then convert the suffix -ane to -ene.
- Number the longest chain to give the carbon atoms of the double bond the smallest possible numbers.
- Indicate the position of the double bond in the longest chain by using a prefix (i.e., the smaller number of the two carbon atoms of the double bond).

   Use a hyphen to connect the number to the name.

- Identify, name and number any substituents as is done for alkanes.
- Designate configuration (i.e., cis-/trans-, or (E)/(Z)-), if necessary.

III. Cycloalkenes

- Number the carbon atoms of the double bond as “1” and “2” in the direction that gives the substituent encountered first the smaller number.
- Continue numbering around the ring.
- Identify, name and number any substituents as is done for (cyclo)alkanes.
- Designate configuration (i.e., cis-/trans-, or (E)/(Z)-) only if the ring size is greater than or equal to eight carbon atoms.